The Erasmus Wilson Lectures

ON

THE GENERAL PATHOLOGY OF BONE.

Delivered before the Royal College of Surgeons of England on March 16th, 18th, and 20th, 1896,

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LECTURE I.

Delivered on March 16th.

INTRODUCTION.

MR. PRESIDENT AND GENTLEMEN,—Much of that which concerns the bones is familiar to all, but interest is chiefly taken in them as passive agents; they are looked upon as rods jointed together, as levers upon which the muscles pull, or as bars broken or wrenched out of position by force or eaten away by disease. Now it is with the general diseases of bone, as distinct from the local, that I propose to deal in these lectures. I shall not give any systematic account of them, that would be largely a repetition of what can be found in text-books; but by discussing one after another some of the processes common to these general diseases I may hope to throw some light upon deviations from the normal functions of bone. When we consider the bones from this less common standpoint as organs taking part in the active changes of the body the general affections of the skeleton become still more interesting, for they are found no longer to be isolated phenomena, but to be really linked to one another by many common features. Little information about the normal function of bone can be gathered from direct observations of healthy bone or by experiments strictly physiological in character except on one or two points, such as the formation of blood corpuscles in the red marrow; for the rest, we have to depend upon the changes provoked by disease. The points which I shall take up are such as can be largely illustrated by pathological specimens in the museum of the College.

THE COMPARATIVE PHYSIOLOGY AND EMBRYOLOGY OF BONE.

When we regard bone as one of the tissues of the body which takes an active part in changes, whether physiological or pathological, it becomes desirable in the first place to form some idea as to the general relationship existing between bone and other structures.

A. The relation of the osteogenetic cells to the epidermis and to the central nervous system.—In low forms of life epidermal cells collect salts of lime from the surrounding medium and secrete them in combination with albuminous material in order to form a protecting covering. Certain epithelial cells in a mollusc secrete a simple shell, which serves not only as a protection but also as an attachment for muscles. A crustacean has a shell or exoskeleton formed by epidermal cells from which there are projections inwards. These act as an endoskeleton, offering favourable points for the attachment of muscles, the force and variety of whose contractions are thereby increased. In lower vertebrates bony plates, placoid scales or scutes may constitute an exoskeleton which co-exists with an endoskeleton of considerable complexity. There is an instance of this even among mammals in the armadillo and its extinct relatives. Furthermore, a study of the development of the endoskeleton in fish and amphibia shows that the cells which give rise to cartilage and bone originate in very close connexion with the epiderm. Bone is said to take its rise in mesoblast. But this term mesoblast does not denote cells sharply separated from the cells of the epiblast on the one hand, or from those of the hypoblast on the other. Indeed, one is tempted to use such words as "epimesoblast" and "hypomesoblast" in order to express the fact that certain mesoblastic tissues remain stamped with traces of their descent from one or other of the two layers of the bilaminar blastoderm. Even when some of the mesoblast has already been formed cells may continue to be budded off from the epiblast, and these, after sinking downwards into the mesoblast, become the originators of cartilage and bone. In those fish which have bone in the base of their scales cells of the epiderm produce both the scale and the bone. Cells budded off from the epiblastic layer of a salmon embryo have been traced to form the operculum, clavicle, and squamosal. The cartilage of the head of newts, such as Menobranchus or Necturus, has been also followed back to an origin from epidermal cells.[1] Although it may not be possible to demonstrate so clearly the same connexion for the chondroblasts and osteoblasts of higher vertebrates, yet it is evident that in them the skull, lower jaw, and spinal column are very closely connected with the epiblast during development, whilst it is known that the bones of the limbs spring from the same masses of cells as do the vertebræ. In the first place, therefore, the essential characteristic of the osteoblast—viz., the picking out salts of lime from the surrounding medium in order to secrete them in combination with albuminous material—is met with under its simplest form as a function of epiblastic cells. Secondly, cartilage and bone originate from cells which, although belonging to the layer of the mesoblast, arise close by or amongst the cells of the epiblast.

If a developmental relationship between the bones of the epiderm be allowed, some reason can be given for a pathological connexion between the bones on the one hand and the skin and central nervous system on the other. This developmental connexion is the more interesting because it can be made use of in order to throw some light upon abnormalities of the skeleton of which, as they happen before birth, the cause and the pathology are alike obscure. A sympathy on the part of the bones with the central nervous system brought about during the earliest periods of life by some common causes is illustrated in the following affections: anencephaly, acephaly, spina bifida, hydrocephalus, microcephalus and other kinds of congenital idiocy, congenital skin abnormalities, elephantiasis, or excess of skin with œdema, mikromelia, hydramnios (Salvetti) or adhesions of the amnion noted at birth,—all these occur along with irregularities in the development of the skeleton. The varieties of congenital bone disease have received a great number of names, for observers when examining specimens chiefly of premature or still-born fœtuses have been wont to liken the conditions they found to those diseases which affect the bones after birth. In this country the terms fœtal rickets, fœtal cretinism, fœtal scurvy, multiple fractures or fragility of bone in the fœtus are in common use. Foreign writers employ other names: chondritis fœtalis, mikromelica chondromalacia, vel pseudorachitica, osteogenesis imperfecta, rachitis annulans et mikromelica, achondroplasia, pseudochondritis, chondromalacia fœtalis, osteoporosis, dysplasie crétinoide, osteosclerosis and osteoporosis, aplasie périostale avec osteopsathyrosis (Kaufmann). We may remark of all these names that doubtless the one used by each writer most suitably described the general condition met with by him, nevertheless the general applicability of any of them when used as the name for a distinct disease of the fœtus may be as freely doubted.

Practically in all instances of congenital bone disease there is found a deficiency in length from impaired epiphyseal ossification. In some cases it is the preliminary formation of cartilage which is wanting; in the majority, however, the endochondral and periosteal formations are also deficient, so that the bones are friable; indeed, the diaphysis may be scarcely ossified at all. More rarely, along with marked deficiency in length, periosteal ossification has gone on to produce an eburnated, hard, and massive bone. But to compare the details of the changes occurring before birth with those due to disease in after life involves an obvious fallacy. No fœtal disease can be identified in its causation with rickets, scurvy, or cretinism, and to use such terms tends to beg the question of origin. The mothers have not suffered from rickets or scurvy. The so-called "fœtal cretinism" does not occur with any greater frequency in districts where goitre is endemic than in those places where goitre is only sporadic. Indeed, there is an essential obstacle to the inheritance of cretinism to be found in the fact that cretins are notoriously sterile. Children of goitrous

[1] Platt: Klaatsch.

parents living in an infected region are born quite healthy, and only show signs of cretinism after some months. All evidence tends to limit the cause of cretinism to the water drunk (Kocher). The removal, however, of the thyroid gland from a pregnant bitch is said to cause the puppies to be born with "rickets." In some diseased fœtuses the thyroid gland has been affected or has been noted to be absent, but in others with apparently similar bone lesions the thyroid gland was normal (Shattock). Therefore, neither disease nor absence of the thyroid gland can be a general cause of fœtal bone affections. After birth, however, the thyroid gland becomes such an important factor that both removal and disease, in proportion to its severity, check growth of the bones in length. An absolute arrest of growth took place in a boy aged ten after thyroidectomy, so that he was found eighteen years afterwards to be no taller than at the operation. The removal of the thyroid gland from young rabbits and lambs likewise arrests growth. The epiphyseal ossification ceases, the cartilage cells stop proliferating and become either flattened or distended with fluid. Fibrous tissue grows in from the periosteum and so separates the epiphysis functionally from the diaphysis. It is well known that as a consequence of removal or disease of the thyroid gland affections of the central nervous system and of the skin occur, forming another illustration of the sympathy which connects the bones with the skin and central nervous system.

When in the decline of life the central nervous system suffers excessive fragility of bone may be found, especially in insane and ataxic patients. Gigantic overgrowth, whether of the skeleton as a whole or of part or of the extremities, may be accompanied by similar overgrowths of the skin. In the case of the so-called "elephant man" described by Treves there was a hypertrophy of half the skull and of the right upper limb and feet co-existing with an enormous hypertrophy of the skin. It will be noted that in the comparatively simple cases where one or more of the toes or fingers are affected the overgrowth of the bone is *pari passu* with the skin. Further on I shall refer to two other points in which bone resembles skin, to the possibility of transplanting bone, and the tendency of periosteal sarcomata to spread rapidly by way of the lymphatics and lymphatic glands like the carcinomata.

B. The relations of the bone marrow to the vascular system and to the lymphadenoid tissues.—The bone marrow cells have functions totally different from the osteogenetic cells; in one respect, indeed, the action of the latter is the reverse of the former, for they absorb bone instead of forming it. Bone is absorbed by a process of digestion on the part of the marrow cells; not only does this process affect the septa surrounding the marrow cavity, but also any foreign bone inserted into the medullary cavity is likewise removed. The lymphadenoid tissues—the spleen, lymphatic glands, and thymus as well as the bone marrow—all originate in close connexion with the bloodvessels from the splanchnopleural layer of the mesoblast which surrounds the hypoblast of the alimentary canal. First of all, some of the cells of the splanchnopleure form the walls of the vessels whilst others produce the blood corpuscles. At a later stage lymphadenoid tissue arises in the connective tissue around blood capillaries by the white cells which have emigrated collecting in the fine meshwork (Gulland). The bone marrow forms from the vessels which push their way into the previously solid cartilages. These structures—the spleen, the lymphatic glands, and bone marrow—produce red as well as white corpuscles during fœtal life. In the adult the production of red corpuscles is no doubt confined on the whole to the red bone marrow, but whenever a more rapid formation is required—e.g., in order to make good losses by acute hæmorrhage—the spleen supplements the red marrow. The absorptive or digestive properties of certain marrow cells is a feature shared in common with the cells of lymphadenoid tissue. It is especially well marked in the lymphatic gland tissues surrounding the alimentary canal. I may recall the fact that Metchnikoff took one of his earliest instances of the digestive properties of these cells from those which are found around the alimentary canal of the water flea, Daphnia, whilst later Ruffer described the phagocytic properties of the cells in Peyer's patches. It is well known that the general diseases of the bone marrow are closely allied to those of the spleen and to those of the lymphatic glands, the chief features of which are anæmia or leucocythæmia, with new growths such as myeloma and lymphadenoma (Spencer).

THE EFFECT OF ALTERATIONS IN THE CIRCULATION OF THE BLOOD THROUGH BONE.

In many books one may find bone formation and bone absorption, hypertrophy and atrophy, hyperplastic and atrophic inflammations ascribed both to an increase and also to a decrease in the amount of blood circulating through the bone. In such different conditions as mollities ossium and osteitis deformans the same observations may be met with—viz., that the bones were "excessively vascular," "congested," "contained much blood," &c. Something is evidently wanting to the explanation when one and the same result, atrophy, is attributed both to an increased vascularity and to a diminished vascularity, when an increased vascularity can be said to promote both bone formation as well as bone absorption. In vascularity as found post mortem there is no distinction between the arterial and venous forms. Observations have to be made at surgical operations on this point.

A. A slight increase in the arterial blood-supply favours bone formation and normally occurs in those parts of bone in which growth is active.—A relatively large supply of blood to any tissue corresponds with physiological activity, and conversely physiological activity necessitates a correspondingly large blood-supply. During the years of growth, especially between ten and seventeen, the greatest activity is at the epiphyseal and diaphyseal junction. The epiphyseal end of the bone, at which growth is most rapid, has the greater blood-supply. The lower epiphysis of the femur, the upper epiphysis of the tibia, the upper epiphysis of the humerus, and the lower epiphysis of the radius are sites of active growth. The course of the nutrient artery in these bones may be held to favour the blood-supply to the epiphyses above mentioned. Any injury which tends to separate an epiphysis from its diaphysis during the growing period is always attended by the extravasation of much blood on account of the previously existing vascularity. During the active period of growth the vascularity may be so increased as to be a cause of actual pain—"growing pains" (Poncet). There can be no doubt, moreover, that it is this special vascularity of growing bone which causes the juxta-epiphysary ends to become so frequently the seat of septic inflammations. The greater the vascularity the more easily will extravasation and thrombosis follow upon a slight injury. The greater the vascularity the more likely are the micro-organisms which chance to be in the blood to reach to and to settle down in the blood-clot. The frequency with which boys between thirteen and seventeen are attacked by acute inflammations in the lower end of the femur or in the upper end of the tibia may be compared with the relative freedom from attack on the part of girls of the same age. The tendency to anæmia in consequence of menstruation along with the smaller bone formation and muscular activity in girls supplies a ready explanation of the smaller vascular supply and thus the rarer occurrence of septic inflammations. A slight increase of the arterial supply to an epiphysis such as results from disease in the middle of the shaft of the bone may cause a disproportionate growth of the bone in length. Very rapid growth of the bones in length may follow the occurrence of a continuous fever—e.g., typhoid fever—apparently from the greater blood-supply to the bones during the course of the fever. An active use of muscles not only improves their own blood-supply, but also that of the bone to which they are attached. Thus by muscular exercise the development of the skeleton as a whole is favoured. But also, as will afterwards be mentioned, the part of any bone of an adult to which active muscles are attached has a larger blood-supply than the rest.

B. Any considerable increase of the arterial blood-supply to bone promotes its absorption.—1. The absorption of the preliminary cartilage during the development of bone is brought about by the entrance of bloodvessels from the periosteum, which thus are said to vascularise the calcified cartilage. 2. An absorption of the pre-existing tissue by means of cells having digestive or phagocytic properties takes place in consequence of the increased arterial blood-supply which constitutes an acute inflammation whether of bone or of the soft parts. In the course of operations for acute epiphysitis surgeons have frequent opportunities of observing how much absorption of bone has happened during the few days that the inflammation has lasted. 3. If a foot be wrenched and so an increased arterial blood-supply or inflammation be brought about in the ligaments, these ligaments will then yield to a force which they would have completely resisted before the inflammation had promoted absorption. So, also,

if in order to correct the rickety curve of a long bone a strain short of breaking be put upon the bone traumatic inflammation and absorption are caused, so that a week afterwards it will bend or break when the same amount of force is again applied. A slight injury to the limb of a growing boy has been sufficient to cause bending or fracture some time afterwards on account of the absorption which had in the meanwhile gone on. 4. The absorption of bone from increased vascularity is not necessarily connected with inflammation. Nævi or the larger angiomata, the true aneurysms of bone, may produce such an increase of the arterial circulation as to stimulate the absorptive properties of the osteoclasts.

When an attack of scurvy causes an increased arterial blood-supply to the periosteum and bone absorption is very rapid the compact bone becomes very porous or cancellous, the medullary cavity enlarges, and spontaneous fractures occur. When young children are attacked extravasations of blood take place in the neighbourhood of the epiphyses. In adults there may be so much tendency to absorption as to prevent the formation of any callus should a fracture occur during the attack of scurvy. If the scurvy follow shortly after a fracture there may be rapid absorption of callus already formed, so that the fragments again move on one another. Likewise the teeth in such cases become loose and fall out, owing to the absorption going on in the alveoli. Hæmophilia also induces excessive absorption of bone.

C. A diminution in the arterial blood-supply checks the formation of bone whilst absorption continues, so that "eccentric atrophy" is brought about.—As a result of the diminution in the arterial blood-supply the compact bone tends to become cancellous, and the cancellous bone is in its turn absorbed so that the whole shaft may be reduced to a mere shell. There is no evidence of any greater rapidity of absorption than normal. It is the want of a steady formation of bone which is the chief factor. As a consequence of disuse, whether due to ankylosis of a joint or to paralysis, the blood-supply diminishes both to the muscles and to the bones, and hence there follows a marked atrophy of bone. "Eccentric atrophy" regularly occurs as a senile change, varying very much in degree in different cases, and the gradual decline in the periosteal bone formation is the more marked the greater the disuse of the muscles.

Mollities ossium or osteomalacia.—Mollities ossium has been so often used as the name for a variety of affections in which a common end—viz., softening, bending, and pathological fractures—has been attained in such different ways that neither it nor its synonym, osteomalacia, can be applied as the term for a special disease. It is necessary to distinguish—(*a*) fœtal osteomalacia, which has been referred to; (*b*) infantile osteomalacia due to scurvy, which has also been referred to; (*c*) rickety osteomalacia arising in childhood and youth from errors in diet or hygiene (vide *infra*); and (*d*) fragility of bone or osteopsathyrosis.

Some typical cases of fragilitas ossium may be classed as spontaneous pathological variations, a condition which may appear in several members of the same family, for like other spontaneous variations the fragility may be transmitted to some of the descendants, tending soon, however, to die out. Still one can scarcely ever exclude the possibility that other tendencies to fragility have been present. The occurrence in several members of the same family may be due to a similarity of environment, exposing them to the action of causes allied to those producing rickets. The disuse and often distortion of the limb following on the multiple fractures, by lessening the patient's muscular activity, may reduce the circulation below the normal and so lead to "eccentric atrophy." Moreover fragility is the more frequent among girls about puberty (vide *infra*).

Mollities ossium of pregnancy occurs with such frequency in certain places—notably in some of the lateral valleys of the Rhine—as to be there termed endemic. Such facts must be considered by the side of observations made on animals. Certain pastures may give rise to osteomalacia owing to unfavourable seasons, excesses of cold and damp, or, on the other hand, in times of drought. So many cases have before now happened in the same district as to cause the disease to be then regarded as an epizootic one. From this point of view the osteomalacia of pregnancy is allied in its causation to rickets, the general nutrition being impaired, whether by bad food or unfavourable surroundings or by both. But the mollities ossium of pregnancy is connected in some way with the activity of the ovaries, even when the disease has occurred in regions where its frequency has given rise to the notion of a supposed endemic origin. It has been long known that a case of osteomalacia until then progressing may become arrested at the climacteric and the bones even harden again. Of recent years the climacteric has been artificially induced by removing the ovaries, and this so often that the success of the operation is beyond question (Fehling and others). Patients long bed-ridden may soon be able after double oöphorectomy to get up and walk, the bones being again enabled to bear the weight of the body. Some important light has been thrown upon the mollities by the examination of the bones of women dying in the course of normal pregnancy. An increased vascularity has been noted especially in the pelvis and femora, with signs of increased absorption of bone, so that many septa were found covered by a layer of decalcified fibrous tissue (osteoid tissue). That the pelvis and femora are very vascular, due to an increased arterial blood-supply, in mollities ossium of pregnancy I observed myself in a goat which I examined shortly after it had given birth to a kid. The animal was suffering from marked softening and bending of the pelvis and spontaneous fracture of both femora had occurred. I may here observe that such specimens kept in spirit do not preserve the condition existing during life, glycerine must be employed instead. In confirmation of the increased arterial supply to the pelvis and femora I may refer to the fact that the first signs of mollities ossium in pregnancy are aching pains in these bones, and even during normal pregnancies slight but similar pains in the same bones may be met with. Moreover, in confirmation of the excessive absorption due to the increased arterial supply we have the same noted as in the scurvy of adults concerning the delay or non-union of fractures at that in an otherwise perfectly healthy woman. Definite callus may not form until the termination of pregnancy. Excision of the knee-joint in a pregnant woman, the cut surfaces being left healthy, was followed by non-union and dislocation backwards, requiring subsequent amputation. Women who suffer from osteomalacia have been abnormally fertile. It seems, therefore, that the slightly increased vascularity in the pelvis and femora attending a normal pregnancy may become in an excessively fertile woman further increased, and produces the excessive absorption in the pelvis and femora. Girls about puberty suffer from forms of osteomalacia, indicating a connexion with the activity of the ovaries but not necessarily with pregnancy. Sometimes the facts are stated in this way—viz., that the fragilitas ossium occurs most frequently in girls. If osteomalacia occur in a girl about puberty its course may be arrested and restoration of the bones brought about by oöphorectomy. Von Recklinghausen considers the increased arterial blood-supply amounts practically to an inflammation, so that osteomalacia from this point of view may be called osteitis fibrosa. Osteomalacia is not entirely and exclusively an absorption of bone, for irregular formations of bone, osteophytes, &c., have been found.

With *senile osteomalacia* must be classed the osteomalacia of lunatics, of ataxia, and other nervous diseases, as well as that occurring in wasting disease, excluding new growth. In all these cases the "eccentric atrophy,"—i.e., a diminished periosteal formation with absorption continuing, is at bottom due to impaired general nutrition in addition to disturbance of nerve influence.

NORTH-EASTERN CHILDREN'S HOSPITAL.—The twenty-eighth annual meeting of the governors of this hospital was held on May 13th at Devonshire House, Bishopsgate-street, under the presidency of Mr. J. Lister-Godlee. The deficiency shown on the balance-sheet had been reduced during the year from £5323 to £2820, and the mortgage debt had been reduced from £4500 to £3000. With the object of helping further to get rid of the debt still existing there is to be a grand rose *fete* and bazaar at the Queen's Hall on June 23rd, 24th, and 25th, which will be opened on the first day by the Duchess of Connaught.

LITERARY INTELLIGENCE.—The publication (S. Hirsch, Leipzig) is announced of a "Text-book of Gynæcological Diagnosis" ("Lehrbuch der Gynecologischen Diagnostik") by Professor G. Winter and Carl Ruge of Berlin. It contains twenty plates and 140 engravings (partly coloured) in the text. From the specimen pages and illustrations contained in the prospectus announcing the work it would appear to be clear, concise, and practical. The publication price is 14 marks (14*s.*)

RATIONAL THERAPEUTICS AND THE USE OF COMMON REMEDIES.[1]

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THERE is, I think, no better work that we can do as practitioners of medicine than to meet together from time to time in a friendly and informal manner in order to discuss the drugs we are prescribing every day and to compare notes of our experience as to their use. Therapeutics has not yet passed out of the empirical stage, and from whatever source the suggested remedy comes its value has to be tested and proved at the bedside. It is to empiricism tested by bedside observation that medicine owes most of the remedies it finds of use. Yet we often hear this empirical bedside study of the action of remedies spoken of with disparagement, as if it were the opposite of rational, and it was a protest against this misuse of terms that formed one of the most striking passages in Dr. Gowers' recent address. Essentially false as the opposition between empirical and rational really is, it is based upon a laudable desire to bring therapeutics into closer relation with the general principles of science. Unfortunately, this is but a pious wish and not yet an achieved fact. The same confusion between a wish and a fact finds expression in another form in the contrast that is often made between pharmacology and therapeutics.

Pharmacology is a word of recent introduction. Ending in "logy" it is assumed to be a science, and, being a new word, to denote a new science. Now, it will be well to see how far this claim is just. I take down from my shelf some recent book which bears upon its back the title "Pharmacology," and another, written but twenty years ago, labeled "Therapeutics." I turn up in both the same drugs, and what do I find? First, an account of the crude substance and of the sources whence it is derived; then an account of its chemical constitution, of the methods by which the substance can be obtained, the impurities which are present, and the way in which they may be detected and removed; next the results of the physiological investigations into the action of the drug, for the most part performed in the physiological laboratory, upon lower animals, with a summary of the conclusions to be drawn from these experiments and the suggested application to their use in disease; and in all these respects there is no greater difference between the two accounts than the lapse of time and the progress of knowledge accounts for. But the greater part of the account in each case alike is formed, as would be expected, of a statement of the effect of the drugs upon man in health and in various conditions of disease. This part forms three-quarters, nine-tenths, or in some cases even more, of the whole. And how has it been obtained? By clinical observations such as you and I can make and are making every day. If, then, we take away from the account given of any remedy the materia-medical, therapeutic, and toxicological parts, there is nothing left for pharmacology but the physiological action of the drug upon animals, in which special subject of recent years great advance has been made. In this sense pharmacology as distinguished from what used to be called therapeutics comes to be nothing more than a special department of Applied Physiology.

The term is, however, often used in a less restricted sense, and taken in a general way to mean all methods of treatment and the explanations to be given of their mode of action. Thus of quite recent modern books on this subject some, like Ringer's in this country and Wood's in America, are entitled "Therapeutics"; others, like Brunton's, "Materia Medica, Pharmacology, and Therapeutics"; while others, especially on the Continent, bear the simple title of "Pharmacology." Yet there is no difference in the contents of any of these books, the difference lies all in the title—Pharmacology; this proves to be, in fact, but a new name for the old Therapeutics—Rationalistic Therapeutics, if we like to call it so—in which all the sciences, chemistry, physics, physiology, and pathology, are called into requisition to give or to suggest explanations of the results at which clinical observation has arrived. This double use of the term is responsible for much confusion and misconception. The most serious differences between men arise, not so much about things or facts, but because of words the meanings of which have not been accurately defined; and so it is with pharmacology. At the present time this matter has a practical bearing, for everywhere examinations for medical students are being instituted in this subject, and it becomes therefore necessary to define exactly what is meant. We should all agree that we ought to send our students out into practice as highly equipped as possible with therapeutic knowledge and to train them so that they should be able, not only to practise therapeutics, but to think and reason about the ways in which their remedies act, and this knowledge must be tested by examination; but it does not follow that an examination in a special department of applied physiology is also necessary for the purpose. Indeed, the requiring of such examinations seems to rest upon the assumption that therapeutics is an art based upon a science of pharmacology—in other words, that therapeutics is applied pharmacology. Put in this form the fallacy is obvious. It is an absolute reversal of the real relation between the two subjects at the present time, for even the most recent works on pharmacology contain, as stated, comparatively little beyond that which has been derived from empirical therapeutics. We trust this will not always be so, but it cannot be denied that this is the case at the present time.

This subject has a special bearing upon the present discussion, for none of us, I presume, claim to be pharmacologists in the limited sense of pharmacological physiologists, yet we are all therapeutists, and, I believe, thoughtful therapeutists. We use the remedies which experience recommends, and must therefore, I suppose, be considered empirics. Yet we bring to bear all our powers of clinical observation to determine the conditions under which these remedies act, and we try to find if we can some scientific reason why they produce their result. If we can get good reasons we are glad; if not we continue at any rate to use the remedies which we know by observation prove beneficial. If this is not rational treatment, what is it? We may at any rate claim to be rationalistic therapeutists. The real difference between a pharmacological physiologist and a clinical therapeutist is but one of method and of place. Each has an equal desire to know how remedies act and each attempts to solve the problem in his own way. The objects are the same, the methods different. Each field of research is necessary to the other, and each real worker knows it. The special line of research is determined by the man's opportunity and his taste. The physiologist investigates his remedy in the physiological laboratory upon animals, and he has the great advantage that he can modify his experiments at will and make them at his own time and in his own way. The clinical therapeutist's laboratory is the sick room or hospital ward; the subject of his experiments is man, not healthy man, but sick; the conditions of experiments he cannot vary for himself at will; he must take the patient as he is presented to him, at a time which he cannot choose, and when he is perhaps least inclined or fitted for such investigation. But the greater the difficulty the greater the honour of achievement, and I think no one will deny that the difficulties of the clinical investigation of the action of drugs are out of all proportion greater than those which attend physiological investigation. It is perhaps in their suggestiveness that the physiological and chemical studies of remedies have their chief value. For instance, how suggestive is the theory that substances with like chemical constitution have similar physiological action, and what a field of research does it seem to open out. To what brilliant results are Pasteur's observations on fermentation and the lower organisms already leading. Yet is not bedside observation rich in suggestions too? Can we afford to discourage, slight, or despise them because they come from another source than pure science, those happy thoughts, ideas, inspirations we might almost call them, seeds which chance and casual observation dropped into an observant mind? Is not Jenner's discovery of vaccination receiving at last the scientific explanation in Pasteur's work, and shall we call Pasteur's work rational and deny the term to Jenner's?

Yet, after all, wherever the idea comes from, whether from the chemist, physiologist, pathologist, or busy practitioner, in all cases alike, it is at the bedside that it must be tested. This is, after all, the crucial test, whatever the theory

[1] An introduction to a discussion, read before the Willesden and District Medical Society on Jan. 17th, 1896.

be. Many remedies we use and cannot tell why they do good, though we much wish to know; experience proves their value, therefore they must be used. On the other hand, many remedies which come to us rich in scientific promise put to the test prove not to fulfil the promises they held out. Surely it would be as irrational to discard the first as to continue to use the latter.

Rational therapeutics consist in the use of remedies which we know to do good, whether we seem to understand their mode of action or not. But before we endeavour to explain a result we must know whether it is a fact or not, otherwise we are but beating the air. This constant testing and proving of stated facts is the chief function of the therapeutist and for the carrying on of certain lines of such research those have great advantages who are attending patients in their own homes. On practical points of this kind it is that discussions such as that which I have the honour to introduce are likely to prove full of instruction and profit.

The drugs which have been selected for consideration are five: iodide of potassium, liquor arsenicalis, tincture of digitalis, liquor strychniæ, and antipyrin. I propose to take them one by one, for in this way I think the discussion will be more precise and profitable.

IODIDE OF POTASSIUM.

The first on the list is iodide of potassium and this drug illustrates very well the evolution of the science of therapeutics. Crushed sponge was known as a successful remedy for goitre in the thirteenth century and it is probable that it was used by the Chinese much earlier. Fucus vesiculosus was also used later for the same purpose. Iodine was discovered by Courtois in 1811. In 1820 Coimdet of Geneva, finding that both these remedies contained iodine, suspected that iodine was the active agent in the cure, and his theory when put to the test proved to be correct. He extended its use to the treatment of scrofulous glands, and then came the discovery of its action in syphilis in 1831 and of its effect in the elimination of lead and mercury from the body in 1844. Further investigation has shown that iodide of potassium is eliminated chiefly by the kidneys, but it is found in the blood, saliva, milk, and even in the urine of a sucking child of a mother who is taking the drug, and that it is present also in the skin, liver, spleen, lymph glands, and muscle, but not in the brain. Its physiological action is not understood, and nearly all our knowledge of the drug is derived from the result of clinical observation—i.e., it is simply empirical therapeutics.

Syphilis.—On the use of iodide of potassium in syphilis there is no need to dilate. The rapidity with which tertiary lesions, such as periosteal nodes, skin eruptions, and iritis, disappear under its action are among the triumphs of therapeutics. Take again a patient with third nerve paralysis. What a comfort it is to know that as such a lesion is almost always syphilitic it will get well under iodide of potassium. In the early stages of syphilis the diagnosis is usually easy, but it is in the later stages that difficulties of diagnosis begin. It is then that diseases of the nervous system and of the viscera prevail. It is then that nondescript nervous symptoms develop: pains in the joints, pains in the bones and head, over the liver and in the abdomen, and even in the chest; perhaps paroxysms of intense neuralgia. Treatment on general lines has been tried without success until the syphilitic origin is at last suspected, and iodide of potassium effects the cure. Perhaps some of the most striking cases are those in which profound cachexia develops without obvious cause, a condition common enough in children and generally recognised, but not rare either in the adult. I saw a young woman some time ago who was healthy until marriage, and although she had had no sign of syphilis, and her medical attendant could not believe that she had been syphilised, yet her husband was known to have led a loose life, and iodide of potassium restored her to health when iron and all other treatment had failed. I saw a man not long ago with symptoms which might have been due to advanced multiple sclerosis or even, except for the want of mental symptoms, general paralysis of the insane, in whom no history of syphilis could be obtained, yet iodide of potassium and rest rapidly cured him, and the case was doubtless of a syphilitic nature. Of the cure of syphilitic diseases of the nervous system by iodide of potassium we must speak with caution, yet all will admit the benefit the drug does, though the question of complete cure may be more difficult to answer. I do not think we can go so far as to say that the cure of a doubtful disease by iodide of potassium is certain proof of specific origin, but in many cases it certainly is strong presumptive evidence. No doubt much depends upon the stage of the disease. The most advanced forms of syphilis of the nervous system consist in fibroid degenerations, and we can no more expect to remove these by drugs than we can to charm away the scar of the syphilitic ulcer in the skin. Yet in the early stages of syphilitic infiltration we may expect to do, and really probably succeed in doing, as much as we see daily happen under the action of the drug in the skin and superficial parts of the body. It is in the early stages of syphilitic disease of the nervous system, when the lesions are recent and gummatous, that cure may be effected, not in the later, when irreparable damage has been done and the wasted nervous structures have been replaced by fibrous tissue. It is in these stages, when the nervous affection can hardly be definitely named and before it can be called, e.g., tabes dorsalis or lateral sclerosis, that the good may be done and, as in some of the cases mentioned, apparent cure be the result of treatment. It is usually stated that in cases of syphilis which have been already treated with mercury iodide of potassium converts the insoluble compound which is supposed to be formed between mercury and the tissues into a soluble one, thus setting the mercury free again, and it is in this way that the salivation sometimes caused by iodide of potassium in these cases is explained. It is, however, proved that iodide of potassium has a curative effect on syphilis in a person who has taken no mercury at all. It would be interesting to hear of instances of this kind, for in the present day, when syphilis is treated with mercury as a matter of routine, such cases are necessarily rare.

Poisoning with lead and mercury.—There can be no doubt of the effect which iodide of potassium has in promoting the elimination of these two metals in cases in which symptoms have been produced by them. Clinical experience is confirmed by the chemical examination of the urine in which the administration of the drug is increased by an increased elimination of the metal. These metals form insoluble compounds with albumin and thus become fixed in the tissues. Iodine releases them and does so, it is supposed, by forming a soluble substance by double combination with the metal and albumin. This pharmacological explanation even if it proved to be incorrect would not affect the correctness of the clinical observations.

Aneurysm.—A great deal has been written about the efficacy of iodide of potassium in aneurysms, especially intra-thoracic aneurysms of large size, and I think there can be no doubt that it does relieve the pain and lead to diminution in the size of the sac, yet it is not easy to determine this point because the patient is usually at the same time being treated in other ways—e.g., by diet and complete rest. Certainly the improvement is not due simply to coagulation in the sac, for in many cases where much relief has been experienced the sac has been found empty of clot. It is tempting to believe, inasmuch as so many aneurysms are the result of syphilitic disease of the arteries, that iodide of potassium might cure them; but whatever action it might have upon early syphilitic disease of the vessels (and of this there can be little doubt) it can hardly be expected to produce any effect when a large aneurysm has formed, for the aneurysm is the consequence of past syphilitic disease and not associated in all probability with any active disease of the kind. The accepted explanation is that the iodide of potassium reduces blood pressure and diminishes the force of the heart's contraction, the aneurysmal sac being thus permitted to contract and the symptoms being relieved.

Rheumatism.—Iodide of potassium is one of the stock remedies for all forms of muscular rheumatism, though its place is being taken to a great extent now by salicylate of soda. In the same way it is one of the stock remedies for all forms of the chronic joint troubles which are called by the generic term of "rheumatism." It is, however, entirely without effect in rheumatic fever, a specific affection which, in my opinion, has nothing whatever to do with the great majority of cases which we call rheumatism in this country. Its effect is most striking perhaps in those cases of chronic rheumatism or gout which are associated with chronic lead poisoning.

Diseases of the chest.—In the treatment of diseases of the chest iodide of potassium does not play any great part. It seems to be of service in some cases of chronic bronchitis, possibly because it is excreted by the mucous membrane of the bronchi, as it is by all other mucous membranes. In

asthma it certainly is a remedy of use, not so much at the time of the paroxysms as between the attacks, and it appears to have the effect of diminishing their frequency. Certainly, many asthmatic patients believe in the drug and attribute a great benefit to the taking of it. In plastic bronchitis it is said to be the only remedy which is of any service at all, and so far as my experience goes, which now extends to several cases, I certainly endorse that opinion.

Iodide of potassium appears to be an alterative—i.e., to have a subtle influence upon cell nutrition. For this reason it is largely given in the chronic processes of inflammation, with a view of controlling it or of removing its products. It is thus one of the chief routine remedies for almost all chronic inflammatory affections of the joints, especially of the serous membrane—e.g., of the joints and pleura. As an alterative also it is given in all forms of enlargement of the lymphatic glands, especially those of a tuberculous nature, and it is stated to have a strong action upon certain other glands, especially the testicle and the mamma; thus it is an efficient galactogogue, while prolonged administration of the drug may, it is stated, lead to atrophy of the testicles. It will be interesting to have any confirmation of these statements, of which I have no personal experience to bring forward. Upon dropsy it has been said to have a specific effect, but there are so many causes of dropsy, and the term is such a loose, indefinite one, that it is hard to know exactly what is meant. In diseases of the skin it is not much employed, unless in those of a syphilitic nature; but I have seen it do much good in large doses in scleroderma.

I now come to a very interesting part of my subject—viz., the consideration of the peculiar effects which are sometimes produced by the administration of the drug; and here we are brought face to face at once with one of the most disturbing factors in therapeutics—viz., idiosyncrasy, that great stumbling block in the way of applying any physiological results upon animals to man or even without caution to all men alike. Iodism in its ordinary form of headache and catarrh I need hardly do more than mention. I suppose we may assert that it is capable of being produced in every patient, yet there are striking differences in this respect following in one case the administration of the smallest dose, while in others not appearing until very considerable doses have been taken for some time. As iodism is one of the practical difficulties we have to deal with in the administration of the drug it will be well, therefore, to consider what means there are of obviating it. It is in many patients a merely transitory phenomenon, and after two or three days the symptoms pass off, though the dose has not been changed, and even if the dose has been increased; indeed, it has been paradoxically asserted that the cure for iodism is to double the dose. The subsidence of symptoms is aided often by the administration of a saline purge. Usually if the medicine be reduced or stopped for a day or two until the symptoms have passed off its administration may be then resumed and iodism will not return; but in some cases the idiosyncrasy is so marked that even the smallest dose produces the effect, and nothing short of the entire giving up of the drug will suffice. But before this it will be well to try whether the iodide of ammonium or of soda is not tolerated better. It is stated that the addition of carbonate of ammonia or of the aromatic spirit of ammonia to the mixture will check the occurrence of iodism, but I have failed to satisfy myself of this, and so I see has Ringer. Another form of iodism, though not quite so common as the catarrhal form, is that in which the drug causes great depression of mind and body, often without coryza or any other of the common symptoms. Sometimes it upsets the digestive organs, causing loss of appetite, nausea, vomiting, or watery purging. Puffiness and swelling beneath the eyes are not uncommon with marked coryza, but they occasionally occur without it, thus giving the face a renal aspect. Salivation and diaphoresis are also stated to be occasional results, but I cannot say that I have observed them.

The iodide eruptions have always excited interest. The commonest of them is acne, and this occurs in the usual places, but the acne spots are often of considerable size and attended with a good deal of inflammatory induration. Upon the face, usually associated with acne, a butterfly eruption is often seen, of an eczematous type, extending beneath the eyelids and across the bridge of the nose, and in most of these cases there are well-marked acne spots on the lower part of the nose and cheek. The most striking iodide eruptions, and those most commonly meant by the name, are those which are pustular or even bullous in character, and their usual seat is the face; and, strange to say, some of the most marked forms of eruption have appeared some time after the administration of the drug has been suspended. General diffuse erythema is met with sometimes over the whole body, but it is stated to be rare. I do not think it is so uncommon on the legs, and in this position it is often hæmorrhagic. A patient came under my treatment for a punctate hæmorrhagic erythema of the leg and he volunteered the statement that, among the many things that would produce it, iodide of potassium was the principal. I was subsequently enabled to observe that the administration of a few grains of iodide of potassium brought out markedly hæmorrhagic erythema. Lastly, cases of general purpura have been described, and one or two of these have proved fatal, but this condition is extremely rare.

The effect of iodine upon the lesions of syphilis has led to its use in other specific affections, especially, for instance, tubercle. In tuberculous affections of the lymphatic glands, as well as in tuberculous affections of the peritoneum and perhaps of the pleura, it does seem to have some effect. In phthisis and in tuberculous peritonitis I believe it to be useful. There is one other rare but remarkable disease in which it seems to be by far the most effectual remedy we possess: I refer to actinomycosis. In a little patient recently under my care suffering from this disease involving the pleura and chest-walls, the child, who had been reduced to a shadow and looked desperately ill, made no improvement until iodide of potassium was administered, and then at once gained flesh, colour, and strength, and seemed as if he might recover. Unfortunately, he died by misadventure during the administration of chloroform given for the purpose of opening one of the small abscesses.

The therapeutics of iodide of potassium open out a very large field of discussion, but there are, I think, one or two points upon which information would be specially valuable—viz, (1) iodism and the means of counteracting it; (2) iodide rashes and the way to remove them; (3) examples of peculiar idiosyncrasies; (4) instances in which the drug has caused stoppage of the secretion of milk or atrophy of the testicles, free purgation, or vomiting; and (5) instances in which effects have been produced upon a suckling child through the milk of the mother while taking the drug.

In respect of the mode of administration it is usually given in solution in water or it may be given in milk. One point has come out in recent years—viz., that very large doses of the drug may succeed in producing an effect when small ones have failed, and the amount so given in the twenty-four hours sometimes reaches extraordinary dimensions, even to the extent of four or five ounces.

LIQUOR ARSENICALIS.

The next remedy on the list is liquor arsenicalis. The history of arsenic in therapeutics is interesting from our present point of view. It was known to the ancients in the form of orpiment and sandarach or realgar. Dioscorides gives the following description of the drug: "Orpiment, auri-pigmentum—i.e., the yellow sulphide—is astringent and corrosive, burning the skin with severe pain with the production of an eschar. It removes fungous flesh and is a depilatory." He then describes sandarach or realgar—the red sulphide—in the same terms, stating that, "mixed with resin, it causes hair to grow when destroyed by pellagra, and that with pitch it removes rough and deformed nails. With oil it is used to destroy lice, to dissolve abscesses, to heal ulcers of the nose (probably lupus), of the mouth, and fundament (probably epithelioma). With wine it is given for fetid expectoration, and its vapours, with those of resin, are inhaled in chronic cough. With honey it clears the voice and with resin is very excellent for shortness of breath." In China it was used from very early times as an application to venomous wounds, also as a remedy for ague and as a tonic in several diseases. For skin diseases it has been employed by the Hindoos for centuries, though its use was not introduced for this purpose into this country until the end of last and the beginning of this century. It was introduced into Europe about the beginning of the seventeenth century, and was then used as a remedy for pulmonary affections associated with dyspnœa, probably asthma and chronic bronchitis, as well as for different forms of ague. The analysis of a patent ague medicine by Fowler, and the discovery in it of arsenic, led to its extensive use for intermittent fever in this country; and at the end of last century it was a common remedy also for various scaly skin eruptions and for neuralgia. After having had a period

of popularity it fell into disuse and was almost forgotten until Boudin, in the middle of this century, resuscitated it, and since that time it has been one of our stock remedies for all the affections named. Of recent years numerous experiments have been performed on animals, and they seem to show that arsenic has a definite effect upon the nervous system, especially upon the cardiac ganglia and respiratory centres; but it is difficult to see any relation between the results of these experiments and the action of the drug in man; so that we are indebted again for our knowledge of the action of this drug in disease simply to observation upon man—in fact, to the oft-disparaged empiricism, or, as I should prefer to call it, to thoughtful clinical observation. I do not propose to speak of the local action of arsenic externally, but only of its internal use as a physic; and this limitation, I believe, the committee desired, when they placed upon the list they first sent me, not "arsenic," but "liquor arsenicalis."

The facts about the drug other than clinical which have been discovered by clinical and pathological investigation are these: that arsenic is rapidly absorbed from the stomach and found in a few minutes in the circulation; that it is eliminated chiefly by the urine and sweat, and also by the mucous membrane and glands; but the elimination takes place slowly, so that arsenic may be detected a fortnight or more after it has been stopped. It is also eliminated by the liver, and in full doses causes fatty degeneration of both the liver and the kidneys, with the occurrence of albuminuria. It has especial affinity for the nervous system and is found in very much larger amount in the brain and spinal cord than in the other tissues of the body, except, perhaps, the liver. In toxic doses, besides its effect upon the liver and kidneys, it destroys the red cells, dissolves the hæmoglobin, and as the result leads to hæmorrhages into the various tissues of the body.

Ague.—Arsenic is now recognised as the most powerful anti-periodic except quinine, and it may succeed where quinine has lost its power, and it is stated that the relapses are longer delayed under treatment by arsenic than by quinine. It is useful also in all affections of malarial origin, and especially in those malarial neuralgias the causes of which are often so difficult to determine. I do not know that any satisfactory explanation of its action in ague has been given, yet it may lie in the action of arsenic on the blood-cells in which the parasite of ague is found.

Diseases of the skin.—It is one of the stock remedies in all the chronic diseases of the skin, and especially in psoriasis. In some cases of chronic eczema it is found useful, but in many its use is disappointing, and in some it does positive harm. It is largely used in animals to give them a fine glossy coat, and in Styria and the Tyrol it is habitually taken by both men and women to produce *embonpoint* and fineness of complexion. Of recent years it has been largely advocated for the treatment of herpes zoster and post-herpetic neuralgias, but its use, I think, is disappointing.

For asthma it is a very old remedy and in certain cases almost a specific, being administered either by the mouth or by inhalation, as in the form of cigarettes. As a general tonic it is useful in a variety of conditions, provided it does not upset the stomach, but this can be generally avoided by giving it in small doses after food. Of recent years it has been largely used in affections of the nervous system, possibly because of the affinity which the drug shows, as already stated, for nervous tissues. Thus it has been given in epilepsy, but I think without much success. For neuralgias of all kinds it is an effective remedy. It is said to do good even in attacks of angina, but of this I am sceptical; but, having other more reliable remedies, I admit that my scepticism does not rest on much experience. As already stated, its chief use is in malarial neuralgias—e.g., brow ague.

The nervous disease for which it is most employed at the present time is chorea. It used to be recommended that small doses should be given and continued for some time. The result was not very obvious. Recently large doses have been advocated as soon as the patient comes under treatment, even as much as fifteen or twenty minims of the liquor arsenicalis three times a day even to a small child. It is often easy, if the drug be gradually increased, to reach amounts like this in the adult as well as in children, but it is somewhat startling to begin with such large doses from the first. However, I have myself tried this treatment in a number of cases and I have not seen any poisonous effects produced by it. Yet I cannot say that I am satisfied as to the immediate benefit which follows, nor can I endorse the statement that large doses will cut short a bad case within a few days. In a severe case of chorea which has been neglected and badly treated at home admission into a hospital is sure to be followed within a few days by marked improvement without the use of drugs at all, and if arsenic be administered as soon as the patient is admitted it becomes extremely difficult to know whether the improvement is to be referred to the drug or to the general management of the case. In private practice, where the cases are more closely under observation, it is quite possible that valuable information on this point may be forthcoming.

I do not propose to go into the question of acute arsenical poisoning, accidental or intentional. But on the subject of chronic arsenical poisoning of accidental origin, such as that acquired by arsenical papers and in other methods, a society of this kind would be likely to give information of great value and interest. The chief symptoms are general failure of health, loss of appetite and impaired digestion, with weakness of the eyes, thirst, salivation, cramps and colic, and in extreme cases emaciation, œdema of the face and body, perhaps albuminuria and ulceration in the skin. When symptoms of profound failure of health of this kind arise, for which no cause can be found, it is well to bear in mind the possibility of some accidental poisoning, of which, perhaps, arsenic is the most likely, sometimes accidental, as in the case of arsenical papers, sometimes intentional, with criminal intent, as in certain legal cases which we can all remember. Tolerance of the drug is easily established, so that the prolonged administration of the medicine necessitates the increase of the dose. The amounts which may be taken may be very large, as with the arsenic-eaters of Styria and the Tyrol. Cutting off the drug suddenly in such cases is said to produce grave symptoms of poisoning, which may be relieved when the drug is resumed. It would be interesting to know if any experiences of arsenic taking and its results can be communicated.

The prolonged administration of the drug is sometimes followed by mischievous, though very interesting, results, of which I may mention two—viz., arsenical pigmentation and peripheral neuritis.

Arsenical pigmentation is comparatively rare. Its colour is a dull brown. It may be general, but is more often irregular in distribution and sometimes more marked on exposed parts—e.g., the face and neck. When given to cure a skin disease—e.g., psoriasis—it may be limited to the seat of the eruption. Other skin eruptions are rare. Papular, measle-like rashes are described on the face and other parts of the body, and urticaria is comparatively common. Herpes zoster has been attributed by many writers to the drug, and pustular ulceration or even gangrenous eruptions have occurred after toxic doses. In these rashes the effect of idiosyncrasy is strongly marked. Thus marked pigmentation followed the taking of three minims only of the liquor arsenicalis three times a day for a week only, and in another case five minims had been taken three times a day for three weeks. Neuritis following arsenic is very rare and all cases of it should be recorded. It resembles lead poisoning and may appear as wrist-drop, though in advanced cases it may more closely resemble alcoholic neuritis and affect both legs and arms.[2]

TINCTURE OF DIGITALIS.

Digitalis is a drug that has no ancient history. It was used in the sixteenth century as an application to wounds, a vulnerary, and in the middle of the seventeenth century Culpepper writes that "it has been used by the Italians as a dressing for recent wounds and old sores, that it is recommended as a purgative, emetic, and deobstruent, and that it is beneficial in scrofula and scalded head, and that it has been found of late to cure divers of the falling sickness that have been troubled with it above twenty years." It was introduced into the London Pharmacopœia in 1721, and again omitted in that of 1746. It had been a popular remedy for some time in several parts of England for dropsy, and in 1775 was established as a good remedy for this condition by Withering, so that in 1788 it became a recognised article again in the Pharmacopœia. From this time it has been largely used in clinical medicine, but the more exact study of the drug dates from the middle of the present century. The investigation of its physiological

[2] Dr. James Taylor, in the course of the discussion, referred to the occurrence of neuritis following the administration of large doses of the drug in chorea.

action shows that in animals small doses increase the contraction of the heart, while in large doses the heart becomes irregular and finally stops in a condition of contraction. It appears to stimulate the cardiac and vaso-motor nervous system, as well as to increase the force of muscular contraction.

In man it first produces slowing of the pulse with a rise of blood pressure, regulating the heart's action and strengthening it. This sedative and regulating action upon the heart caused Bouillaud to designate it "the opium of the heart." With larger doses the pulse becomes rapid and the pressure falls, and in toxic doses the pressure falls still more, the heart becomes slow, and more and more irregular until it finally stops beating.

In therapeutics digitalis is chiefly used on account of its effect upon the heart, and especially where the heart's action is irregular and weak, for which condition it has become one of the stock remedies. Inasmuch as digitalis prolongs diastole and increases ventricular contraction it is just in mitral stenosis that it would appear to be chiefly indicated, for the lengthening of diastole would give the blood longer time to make its way through the narrowed mitral orifice, while the increased ventricular contraction would drive a larger quantity of blood out into the arteries, thus improving the general nutrition of the body, in which the heart would also share. It is, in fact, in mitral stenosis that it is found to be most serviceable, but it is almost as useful in mitral incompetence too, and this does not seem quite so easy to explain. These theoretical considerations would suggest that it was distinctly contra-indicated in aortic regurgitation, and it is true that it has to be given with greater caution in all aortic cases; yet, with caution and in smaller doses, I am satisfied of its usefulness even in aortic regurgitation. It has been stated that it is not a desirable remedy in cases of fatty heart. I do not agree with this, for I have given the drug frequently in all forms of weak heart and with great advantage, iron and digitalis being the most effective combination I am acquainted with for these conditions. It is especially useful in those cases of dilated and weak heart which are not uncommon in advancing years, but it is equally beneficial in other forms of weak heart, as, for instance, in the later stages of granular kidney, or even where the heart is enfeebled in the course of fevers.

In a very remarkable group of cases, that of acute myocarditis, of which I recorded an interesting series some years ago, the drug was very useful, but it exhibited in a marked degree the effect of the prolonged administration of the drug. At the time of commencing the treatment the heart was making a number of feeble beats, 150 or more in a minute, and digitalis was given with the view of decreasing their number and increasing their force. This it effectually did, and then after a time suddenly, without any symptoms at all in the patient to draw attention to the change, the pulse-rate fell, quite abruptly in some instances, to not more than 40 in the minute. The patient seemed in no way worse for this, and it would not have been discovered if the pulse had not been felt and counted. The drug was stopped, some stimulants given, the pulse rose to 70 or 80, and convalescence proceeded satisfactorily. In most of the cases, grave as the disease was, recovery took place but slowly and after a prolonged illness, as would be expected. Digitalis is also of great service in the alcoholic heart—i.e., the degenerate, dilated heart of drunkards, what is described popularly in Germany as the Bier-herz; but in this country we see it more often in spirit-drinkers. As a diuretic digitalis acts not directly upon the kidney, but indirectly through the circulation by its effect upon the heart and vessels. In the early stage of acute renal disease, when the tension is raised, digitalis is not a good remedy, yet it is not infrequently prescribed, though for a different reason. It is given when the urine contains some considerable amount of blood, with a view of checking the hæmorrhage, but I do not think it a useful remedy even then. It is in the later stages of acute nephritis or in chronic parenchymatous nephritis, when the tension is low, the powers feeble, and the heart weak, that digitalis does most good, and then it acts by bracing up the circulation. In granular kidney, again, it is not until the later stages, when the tension falls and the heart is weak, that digitalis is a remedy of real use; then it does good, for when the tone of the vessels is restored the patient is better. High tension in granular kidney is a part of the disease, and though a man would be better without a granular kidney at all, still if he has one he is better with high than low tension in his arteries, and it is, I believe, almost as great a mistake to use depressing remedies to lower tension in the early stages of granular kidney as it would be to refrain from giving digitalis, on theoretical grounds, in the later stages.

Digitalis has been advocated as a hæmostatic. Its introduction for this purpose was due to the accidental discovery that digitalis in full doses caused contraction of the uterus and therefore checked metrorrhagia. Thus, as in the case of ergot, its use became extended as a remedy for hæmorrhages from other places, but I think there is little or no evidence that it has any action of this kind. It used to be advocated in the treatment of hæmoptysis on theoretical grounds, digitalis contracting, it was thought, the small arteries and capillaries, from which it was then supposed that hæmorrhage in hæmoptysis took place. As a matter of fact, it was found to do little of the kind, and now we know that its action could not be beneficial, but, if it had any action at all, would probably be harmful, inasmuch as the hæmorrhage comes not from small vessels but from an aneurysm or rupture of a large vessel in the lung, so that if digitalis produced the effect desired and contracted the small arteries it would dam the blood up beyond the ruptured vessel and thus make the hæmorrhage greater. I suppose the giving of digitalis for hæmoptysis would in the early days have been called rational because physiological reason could be assigned, yet, tested at the bedside, it was found to be useless. Now the theory upon which it was based is known to be incorrect, the treatment ceases to be rational and the rational therapeutist does not use it for this purpose any more. In chronic bronchitis its use has been advocated also, but here again, I think, its only benefit is due to its action upon the heart.

In acute pneumonia digitalis was for a long time one of the stock remedies as it was for other fevers. Upon the temperature in such fevers digitalis has no effect, and in large doses it has long been given up as a dangerous and harmful remedy. Yet it is by no means without its use on account of the effect it has upon the heart. It is from the heart that so many cases of fever die and many of them may be saved by a judicious use of this drug. For myself, however, I prefer the citrate of caffeine, which, associated with strychnia, I believe to be one of the best combinations where the heart is failing in fevers. The effect of digitalis upon the falling sickness is referred to in the early description of the drug given by Culpepper, which I have quoted, and quite recently Dr. Gowers has advocated the use of this drug in epilepsy in combination with belladonna, as it seems to increase the effect of the bromides. A few years ago full doses of the infusion of digitalis were advocated in delirium tremens. The discovery was made by accident by Dr. Jones of Jersey, to one of whose patients an ounce of the fresh infusion of digitalis was unintentionally given, but so far from doing harm it did good, and subsequent experience led Dr. Jones to advocate this mode of treatment strongly. I have not used it myself much, for most cases of simple delirium tremens get well with general treatment and little medicine. It will be interesting to know what the personal experience of the society is on this point.

There is a general opinion that the best preparation of the drug is an infusion in cold or warm water, but that which is in most common use is the tincture, the only objection to which is that its strength appears to vary somewhat. The different substances obtained chemically from digitalis and included under the term "digitalin" are not popular on account of the uncertainty of their composition and action. There appear to be at least four different glucosides, all of them very poisonous and with a somewhat different action; they occur in the different common forms of digitalin in different proportions: thus Homolle's digitalin consists almost entirely of Schmiedeberg's digitalin; Nalivelli's crystallised digitalin consists, on the other hand, almost entirely of Schmiedeberg's digitoxin. Until the composition and activity of these different digitalins become more constant I think we should do well to abide by the well-tried preparations—viz., the tincture and the infusion.

Digitalis is slowly absorbed and slowly eliminated; it is thus cumulative in action, so that it is wise to watch the effect of the drug. It may be necessary to suspend its action from time to time. Yet this is by no means always necessary, for I have had patients continue to take the tincture of digitalis for months together with nothing but advantage. However, the ill effects of digitalis may appear sometimes quite suddenly and without warning. I

have already referred to the sudden drop which may take place in the pulse, and another symptom produced by the drug is vomiting. The sickness, which is often spoken of as "cardiac vomiting" because it is so often met with in cardiac cases, is in many instances due to the digitalis, for as soon as the drug is stopped the symptom passes away and does not return unless the drug be given again. The influence of idiosyncrasy is as well marked with digitalis as it is with the other drugs I have been speaking of, and in some instances hardly the smallest dose of the drug can be tolerated. I do not know, however, of any peculiar effect that idiosyncrasy causes.

Time has not permitted me to consider all the drugs placed upon the list by your committee. The rest must be reserved for other occasions. In preparing this paper I have had to review my own experience with the common remedies and to consider the conclusions to which it leads me. This has proved a task not only interesting but useful, and I trust that others may have found it so too.

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EIGHTEEN CASES OF INDURATED PSEUDO-CHANCRES.

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I AM indebted for the following examples of this interesting lesion to the observations my father has made on cases occurring in his private practice during the last few years. Mr. Hutchinson, in the London Hospital Reports for 1866, described twelve such cases, which he has preferred to call relapsing chancres. The word "relapsing" seems to imply recurrence in the original site. This is certainly the usual course, but Mr. Hutchinson, in speaking of these lesions in the Lettsomian Lectures for 1886, said: "They occur to those who have had syphilis, and usually, but not invariably, on the site of former chancres." Again, in his work on Syphilis,[1] in speaking of second infections of syphilis Mr. Hutchinson records the case of a man who came to him with a "well-characterised" chancre "which he made no doubt he had caught by contagion, although it was only nine months since a previous one, and he was not yet rid of his secondary symptoms." The second sore was on quite a different part of the penis. On the same page he quotes a closely resembling case under the care of Mr. Allingham. Mr. Hutchinson says: "I do not know what to make of these cases of second chancres occurring before the first syphilis is cured and not on the site of the original chancre. It is possible, after all, they are only examples of relapsing or perhaps satellite sores."

Again, the word chancre in the term "relapsing chancres" seems to imply a greater resemblance of these lesions to the initial sore of syphilis than is justified by the course of after events. Microscopically it is, perhaps, impossible to diagnose an indurated pseudo-chancre from the true infecting sore. But from this point all resemblance ceases. Mr. Hutchinson[2] says "they never lead to anything in the way of secondary symptoms." Against this last statement M. Fournier, in the *Archives Générales de Médecine*, 1868, says they are often followed by secondary and tertiary symptoms. The examples I have quoted below seem rather to bear out Mr. Hutchinson's statement. Those cases in which secondary symptoms occurred after the appearance of the pseudo-chancre were all cases in which the pseudo-chancre appeared early in the disease—that is to say, within a few months of the primary infection—thus leading one to suppose that the presence of a pseudo-chancre influenced in no way the occurrence of secondary symptoms. Bumstead, in the last edition of his book on Venereal Diseases, calls these lesions "recurrent indurations." The same objections seem to me to hold with regard to the word "recurrent" as in the word "relapsing." To have called these new sores pseudo-chancres simply would seem to imply some relation to the soft or non-infecting sore or chancroid, besides omitting the one cardinal symptom, induration, so that I have preferred to adopt the name given to these lesions by M. Fournier—namely, indurated pseudo-chancres.

[1] Hutchinson: Syphilis, 1889, p. 467.
[2] Loc. cit., p. 121.

CASE 1. *Appearance of indurated pseudo-chancre without any known cause ten months after original infection.*—In June, 1892, this patient had several indurated sores at the corona and some slightly indurated inguinal glands. The sores appeared five weeks after infection, which took place seven weeks previously, during which time he had had no treatment. He was now treated with mercury, and in a month the sores had all healed, leaving some induration. He was slightly salivated. In August there was an ulcer on the lower lip, and also on both tonsils. In November the throat was still red, though not ulcerated, and the patient complained of weakness. In Feb. 18th, 1893, the throat, which had been quite well, was again red and congested. There was a small spot on the penis. In March all the original sores had again become indurated. The patient said there had been no fresh intercourse. The inguinal glands had not re-indurated; there was no eruption and the throat was still congested. In April the induration had almost disappeared, but the patient again complained of feeling weak. In June there was still some slight induration on the left side of the corona, but no other symptoms. In October there were no symptoms.

CASE 2. *Reappearance of indurated pseudo-chancre five times within eighteen months of the primary infection.*—In June, 1890, this patient had a sore on the penis, which had been irritated by some caustic application. The inguinal glands were hard and discrete. It was at this time two weeks since infection. He was given two-grain pills of mercury and chalk three times a day and was readily salivated. In four weeks the sore had healed and the (?) induration was much diminished, and in August the sore and all induration absolutely disappeared. In October the induration in the sore returned and disappeared again in January, 1891; there was then no salivation and no other symptoms. In March the induration was as marked as when first seen, and the patient was still taking the mercurial pills. In April the induration, which had disappeared, had again returned. In June there were no symptoms. In July the patient stated that he had had intercourse regularly and the induration had returned. In October the sore was again red and swollen after intercourse. In January, 1892, there were no symptoms. Since the previous June he had been taking potassium iodide. He had eczema badly, to which he had long been liable. In February the eczema improved under arsenic and there were no other symptoms.

CASE 3. *Reappearance of indurated pseudo-chancre twice within twelve months of the original infection.*—In July, 1892, this patient, aged twenty-six, had a single sore on the glans penis and some indurated inguinal glands. The last intercourse was five or six weeks previously. Mercurial treatment was employed. In August the sore had healed, but the induration and the glands persisted; in September there was ulceration of the left tonsil; in November the throat was well; and in January, 1893, there were no symptoms. In May, however, the left tonsil was again congested and red. The palate had been ulcerated, but by the end of the month there were no symptoms. In June the induration in the old cicatrix and in the glands had returned, but by October the induration had entirely disappeared and there were no other symptoms. In December there was a return of the induration in the old cicatrix; in January, 1894, the induration softened and the patient was much better; in April the induration still persisted, especially in the inguinal glands. In July, contrary to advice, he married. He had lately been taking a mixture containing mercury and potassium iodide. In March, 1895, there was still some thickening in the old cicatrix and he had patches of psoriasis in several places. He was ordered to try Donovan's solution. In May the psoriasis was not increasing.

CASE 4. *Appearance of indurated pseudo-chancre seven years after the primary infection.*—In 1878 this patient was treated for an indurated sore and indurated inguinal glands. He said that he never had any further symptoms. In November, 1885, he had a single indurated sore and very indurated inguinal glands. The sore appeared one week after infection, which took place a month previously. He was put on mercury. In December everything had cleared up. There were no symptoms. He was instructed to continue the treatment for some time longer. In March, 1889, the patient had had no further symptoms.

CASE 5. *Appearance of indurated pseudo-chancre six years after the original infection.*—In February, 1885, this patient

had a single indurated sore on the penis and indurated inguinal glands. It was two months from the date of infection. Mercurial treatment was employed. In March he was salivated and the induration of the inguinal glands was more marked. In April there were secondary throat symptoms, in May the throat was well, and in August there were no symptoms. In March, 1886, a suspicious spot at the angle of the mouth and on the lower lip was noticed. In July there were no symptoms, but the patient had a gleet. In November he had buboes after gonorrhœa. During 1887 he had an indurated inguinal gland, but no other symptom. In July, 1891, the patient stated that he had a patch of inflammation sixteen days previously on the old cicatrix, which was then indurated. In September this had nearly healed, and in December all was perfectly healed under mercury, and there were no further symptoms.

CASE 6.—*Appearance of pseudo-chancre seven years after the primary infection, together with a relapse of rupia.*—In July, 1889, this patient had a return of induration, which was very decided in a cicatrix at the frænum, which had been ruptured since he had a hard sore seven years before. The last intercourse was in February, 1889. Some old scars, the result of rupia, which he had in the previous attack, when he took mercury for three months, were beginning to get red and swollen. Mercurial treatment was employed. In August the induration continued and also in the rupial scars. In October the rupial scars were all quieting down. Every one of them became red, thickened, and raised above the surface. The old cicatrix on the penis was still very indurated and a hard, ridge-like band extended from the frænum to the side of the corona. In May, 1890, there was still some induration in the cicatrix, and the rupial scars had all become pale and soft. In September mistura biniodidi was employed. In November there was some eruption on the forehead. In December iodide of potassium was administered, and in January, 1891, the eruption had all gone. In May there were no symptoms.

CASE 7. *Appearance of indurated pseudo chancre ten years after the original infection.*—This patient stated that in 1880 he had a sore on the penis, which was followed by secondary symptoms. In June, 1890, he had a single sore on the penis; this appeared four days after the last intercourse. The sore was treated with iodoform, but in spite of this it extended and indurated, so the patient was given mercury, and by the end of the month the sore was, though large and circular, commencing to clean. The gums were tender. In July the sore was still extensive, with an indurated base, but healing in part. In July, 1893, the patient stated that he continued with the mercury for some time and nothing followed; he at that time had an indurated chancre at the meatus. He was placed under mercurial treatment. In August the sore was spreading and sloughy. Iodoform was ordered as well as mercury. In November the sore was clean, not spreading but not healing. Potassium iodide was administered instead of mercury. In May, 1894, the patient stated that after his last visit the sores soon improved; he continued taking the iodide mixture up to January, 1894. About three weeks previously he had lived freely for a few days and very shortly after this he noticed an ulceration inside the mouth in the region of the upper left molar teeth. At the time he had a tertiary ulceration extending between the upper and lower jaws. He was instructed to resume the iodide mixture. In March, 1895, there was tertiary ulceration over the spine, which improved during the month under the administration of fifteen grains of iodide of potassium three times a day.

CASE 8. *Appearance of indurated pseudo-chancre nearly four years after the original infection.*—In January, 1888, this patient had an indurated sore, which was followed by doubtful secondaries. He stated that he certainly had a bad sore-throat. In November, 1891, he had a single sore near the frænum ten days from the last intercourse. The sore was indurated and so were the inguinal glands. Mercurial treatment was employed. Within a month all the induration disappeared from the chancre but not from the glands. In December the glands were marbly. In August, 1892, there was herpes on the penis, but there were no further symptoms.

CASE 9. *Appearance of indurated pseudo-chancre four years after infection.*—In 1888 this patient had a sore on the penis, which was followed by secondary symptoms. In June, 1892, he had a single sore on the penis, which came on immediately after intercourse one month previously. There was no definite induration, but one enlarged inguinal gland. The treatment was mercurial. At the end of the month the sore was indurated and not healing and the inguinal glands were enlarging. By August everything had cleared up. In November the patient had herpes and in December there were no symptoms.

CASE 10. *Appearance of pseudo-chancre twice within twelve months of infection.*—In February, 1892, this patient had two sores, one at the root of the penis which was indurated, and the other looking like herpes. The last intercourse was three weeks previously. Mercurial treatment was employed. In March the sore at the root of the penis healed, leaving a large indurated cicatrix. During the month the induration broke down and then healed again. The patient was slightly salivated. In May ulceration of the right tonsil was present. In August both tonsils had become ulcerated and the patient was very weak. In September the throat and tonsils were affected. In December the throat was well; the original chancre at the root of the penis was again red and swollen. There was a patch of psoriasis on the head. In January, 1893, the induration had nearly disappeared. In February, after intercourse a week previously, the chancre was again hard and inflamed. In March there was a circular ulcer on the palate. In May the patient was going on well, but by the end of the month complained of general rheumatoid pains, which were relieved by salicylates and iodide of potassium. During July he had continuous headache, great weakness, and relaxed throat. In October there was a return of the rheumatoid pains, an ulcer on the left tonsil, and a pustular eruption over the cicatrix on the penis. He had been living freely. In December the throat was sore and induration of the chancre was still present. In January, 1894, the throat was better and there was no ulceration. Iodide of potassium was ordered.

CASE 11. *Appearance of indurated pseudo-chancre within four months of the primary infection.*—In January, 1885, this patient had a single indurated chancre on the penis and indurated inguinal glands. The last intercourse was in December, 1884. He was treated with mercury, and this lessened the induration. In March the induration had almost disappeared in spite of the patient having been somewhat negligent with the treatment; some days, he said, he had taken no mercury. In April there was a return of the induration in the cicatrix of the original sore. In November he had had no further symptoms, but had two small sores after fresh intercourse.

CASE 12. *Appearance of indurated pseudo-chancre a year and a half after the primary infection.*—In November, 1888, this patient had an indurated sore on the penis, which was followed by secondary symptoms. In April, 1890, there were a small indurated sore on the penis and indurated inguinal glands. The last intercourse was seven weeks previously. He was treated with mercury and was slightly salivated, but the sore speedily healed. In September there were a deep ulcer on the right tonsil and superficial ulcers on the pharynx. By July, 1891, the patient had not progressed in an altogether satisfactory manner; he would not persevere regularly with the treatment and had fresh sores on the penis, which during the next month healed under mercury.

CASE 13. *Appearance of pseudo-chancre four years after infection.*—In January, 1888, this patient had an indurated sore at the frænum and indurated inguinal glands, it being four weeks since the last intercourse. Mercurial treatment was employed. In February the induration was softening. In March the gums were tender, the induration was less, there were commencing roseola and indurated cervical glands. In April there was roseola on the forehead and back and the throat was tender. In May there was no salivation; the throat, which had been tender, was well; the roseola had disappeared; and with the exception of the indurated inguinal glands there were no symptoms. In June the throat was ulcerated. In January, 1889, there were two sore places in the mouth, otherwise the patient was going on well. In August there were two small spots on the forehead. In October, after intercourse nine days previously, there was a sore on the scrotum and the left testis was swollen. The sore healed in about three weeks on the biniodide mixture. In April, 1890, there were no symptoms. In March, 1892, after intercourse nine days previously, there was a small indurated sore on the penis which in a week healed under mercury and the induration was much diminished. In April everything cleared up. In October the patient had herpes.

CASE 14. *Appearance of indurated pseudo-chancre twenty-two months after infection.*—In January, 1894, this patient, aged thirty, and rather delicate-looking, had a single indurated sore on the left side of the corona with slightly

indurated inguinal glands. This appeared three weeks after infection, which took place one month previously. He had a very long prepuce. Mercurial treatment was employed, and in a week the sore was nearly healed. In February he was troubled with diarrhœa and at the end of the month the induration again increased after two or three emissions. In April the induration was more marked; he was still troubled with diarrhœa. In May the induration had nearly disappeared. In September there were no symptoms. In October the throat was sore. In January, 1895, he had taken a fresh cold and the throat was again sore. In February the post-cervical glands were enlarged and there was an eruption on the scalp; he had taken no mercury for a month. In April there were secondary throat symptoms and nodes on the tibiæ, the post-cervical glands were again enlarged, and he had general rheumatoid pains. In May there was a general improvement. In June he again took cold; the throat was again red and congested, the anterior cervical glands were enlarged and indurated, and there was an eruption on the forehead and vertex. In September the glands cleared up in about two weeks under treatment, but he had taken a fresh cold and they were again much enlarged. In October there was a small pustular ulcer on the forehead, also a relapse of the original chancre on the penis, which was indurated and resembled a typical infecting sore. The inguinal glands were slightly indurated. There had been no fresh intercourse. In November, under iodide of potassium, the ulcer on the forehead disappeared in a few days.

CASE 15. *Appearance of pseudo-chancre six years after infection.*—In June, 1894, this patient had a return of induration in the site of an old chancre which he acquired six years previously, when he took mercury and iodide of potassium for twelve months. He stated that for some time he had had a secondary affection of the tongue, but no other symptoms. He was much troubled with priapism, and he said that there had been no intercourse for two years. The present induration had only been present for a few days. In August the induration was diminishing under mercury.

CASE 16. *Appearance of indurated pseudo-chancre twice within ten months of the primary infection.*—In December, 1893, this patient had a single sore near the frænum with enlarged inguinal glands three weeks since infection. He was treated with iodoform. In January, 1894, the sore had almost healed, but the glands were very indurated. Mercurial treatment was employed. In February one gland was suppurating. In May the bubo had nearly healed, but he had several sores, some of which were indurating. He had had fresh intercourse a week previously. The sores improved under treatment, but the induration at the frænum persisted. The gums were tender. In August there was a return of the induration in the old cicatrix. In October there was another relapse of the induration. He had been living freely, had not gone on with the treatment, and stated that he had had no intercourse for six months. The sore was spreading and inclined to be phagedænic. In November the phagedæna was arrested only after considerable trouble by the free use of nitric acid, and by the end of the month it was all healing up soundly.

CASE 17. *Appearance of pseudo-chancre twenty-five years after infection.*—Twenty-five years previously this patient had syphilis. Two or three years later he had herpes, which lasted for nine months. He had also had diabetes, which irritated the prepuce, causing congestion, rawness, and adhesions. In August, 1894, there was a small sore beneath the edge of the prepuce near the frænum. This appeared at first as a slight thickening of the preputial edge. There was no history of infection. The glands were not enlarged. The induration had existed for five weeks and was extending. Mercury was employed. In October the preputial adhesions were broken down and the induration had become smaller. Later in the month a fresh separation was necessary, and the sore became swollen and thickened, like an infecting chancre. In November the induration had almost gone, but the prepuce was very tender and irritable.

CASE 18. *Appearance of pseudo-chancre within four months of original infection.*—In July, 1894, this patient had gonorrhœa, which commenced about one month previously. A week prior to date the underneath part of the urethra became swollen and a spot appeared on the scrotum. When first seen he had apparently four or five chancres, together with some induration of the inguinal glands. Mercurial treatment was employed and suitable treatment for the gonorrhœa. Within a week the induration was decided, and at the end of the month the sores had healed. In August one sore was still indurated. In October the patient had been under treatment in the north. The one sore soon disappeared, but at the end of September the induration had reappeared in the original site. There had been no eruption on the skin, but he had a very badly ulcerated throat. In November the throat was well, but he had been salivated. In January, 1895, a slight eruption appeared on the forehead; the mercurial treatment was continued. In May there was some enlargement of the right tonsil. In August the patient was going on well. In December he was still progressing satisfactorily.

In the above-quoted cases it will be noticed that the indurated pseudo-chancres appeared at the following intervals after the primary infection: Case 1, in ten months; Case 2, in five months, ten months, eleven months, fourteen months, and seventeen months; Case 3, in twelve months; Case 4, in seven years; Case 5, in six and a half years; Case 6, in seven years; Case 7, in ten years; Case 8, in three and three-quarter years; Case 9, in four years; Case 10, in eleven months and thirteen months; Case 11, in four months; Case 12, in one and a half years; Case 13, in four years; Case 14, in twenty-two months; Case 15, in six years; Case 16, in nine months and ten months; Case 17, in twenty-five years; and Case 18, in four months. Mr. Jonathan Hutchinson in the London Hospital Reports for 1866 described a series of cases of relapsing chancres and found that the relapses occurred within a short time of the original infection. In the *Archives Générales de Médecine*, 1868, M. Fournier also described a series of cases of this nature which he called "indurated pseudo-chancres"; he, too, found that the pseudo-chancres occurred within a short interval of the primary infection—viz., in the second month 7 cases, in the third month 4 cases, in the fourth month 3 cases, in the fifth month 3 cases, in the sixth month 2 cases, in the seventh month 1 case, and in the tenth month 1 case. Bumstead says "relapsing indurations," as he calls these lesions, may occur any time up to the tenth year. The cases I have given seem to satisfactorily show that there is no limit to the time in which these indurated pseudo-chancres may appear.

In Cases 1, 6, 14, 15, 16, and 17 intercourse as a cause of the reappearance of the chancre was denied by the patients. In Cases 3, 5, 11, and 18 there was no history either way. In Cases 2, 4, 7, 8, 9, 10, 12, and 13 the reappearance of the chancre followed on intercourse. In Case 2 the patient had had intercourse regularly. In Cases 4, 7, 8, 9, 10, and 13 the indurated pseudo-chancre appeared within a short time after intercourse—viz., Case 4, within a week; Case 7, within four days; Case 8, within ten days; Case 9, immediately; Case 10, within a week; and Case 14, within nine days. In Cases 1, 5, and 17 the glands were not affected by the new sore. In Cases 3, 4, 8, 9, 12, and 14 the inguinal glands re-indurated. Case 6 showed relapse of the rupia and tertiary symptoms, the patient stating that the last intercourse was six months previously. In Cases 10, 12, 14, and 16 the indurated pseudo-chancres appeared quite early in the disease; secondaries appeared, probably the result of the primary infection, and not influenced in the least by the presence of the pseudo-chancres. Cases 8, 9, 13, and 17 suffered eventually from herpes, to which, according to Mr. Hutchinson, syphilitic subjects are liable.[3] In Cases 2, 4, 11, and 16 the symptoms of syphilis in the primary attack were only the presence of an indurated chancre and indurated inguinal glands. In Cases 1, 3, and 10 the pseudo-chancre appeared while the patients were under treatment for the original sores. Case 2 lived very irregularly, all five relapses occurring while still under treatment. In Case 6 the original attack was severe, but the patient appears to have been only treated for three months. Case 11 took treatment irregularly. Case 14 was most careful in following out treatment. Case 15 was treated in the original attack for twelve months with mercury and iodide of potassium. Case 17 was due (?) to the irritation caused by an adherent prepuce. There is a case of relapsing chancre recorded by Mr. W. Robinson[4] in which mercury did no good, but in which circumcision cured the relapsing induration and relieved the patient of his phimosis.

The effects of treatment and predominant symptoms in these cases.—The treatment of the original attack of syphilis consisted of small doses of mercury such as hydrargyrum cum creta, two grains, three times a day. In Cases 13 and 16 the

[3] Loc. cit., p. 8.
[4] Brit. Med. Jour., Nov. 2nd, 1889.

gums were tender: Cases 1 and 10 were slightly salivated; Case 5 was salivated; and Case 2 was easily salivated. And in all these cases, with the exception of Cases 2 and 16, it should be noticed that the predominant symptom was some affection of the throat or mouth or both. In Cases 1, 3, 5, 8, 12, and 15 though the mouth or throat were affected there was no eruption on the skin. In Case 10 the throat and mouth were badly affected: there was a patch of psoriasis on the scalp after the first relapse, and later general rheumatoid pains. In Case 13 the throat and mouth were affected. An evanescent roseola appeared on the forehead and back. In Case 14 the affection of the throat was very obstinate. There was no rash on the skin, but nodes on the tibiæ and frequently relapsing enlarged cervical glands. Later there was a pustular eruption on the forehead, which rapidly cleared up under iodide of potassium. In Case 15 there was obstinate secondary affection of the tongue. In Case 18 the throat was affected. There was slight erythema on the forehead. John Hunter,[5] in 1786, said: "It often happens that after chancres are healed and all the virus gone is the cicatrices ulcerate again and break out in the form of ch[illegible]" ..... "They appear to be a consequence of [illegible] complaint having been there, as they seldom attack those who never had gonorrhœa or chancres." ..... "I know one case where they broke out regularly every two months exactly to a day." In the *Archives Générales de Médecine* for 1863 Diday published an account of 25 cases of what he called "second attacks of syphilis." He had personally seen 20 of the cases All had had syphilis, the symptoms of which had all cleared up except in a few where some tertiary symptoms were present. In 14 of these cases the only symptom of re-infection was the indurated chancre. He explained this by saying that the nearer the relapse came to the original attack the more feeble was the effect, yielding only a chancre, and *vice versâ* the longer the interval the greater the probability of secondary and tertiary symptoms appearing. The cases I have quoted do not agree with Diday's experience, for Case 4 relapsed seven years after the primary infection and had no further symptoms; Case 5 relapsed in six and a half years and had no further symptoms; Cases 6 and 7 relapsed in seven and ten years respectively and had no secondary symptoms; Cases 8, 9, and 13 relapsed in three and three-quarter years, four and a half years, and four and a quarter years respectively, and had no further symptoms except herpes; and Cases 15 and 17 relapsed in six years and twenty-five years respectively. These last two cases are unfortunately incomplete. Might we not consider fourteen at least of the twenty-five cases given by Diday as instances of indurated pseudo-chancres and not as examples of reinfection?

In 1874 Mr. Gascoyen read a paper before the Royal Medical and Chirurgical Society on Eleven Cases of Syphilitic Reinfection. Mr. Gascoyen thought that the induration at the base of the chancre is as pathognomonic of general syphilitic contamination as are the eruptions, and consequently would have us believe that in Case 1 of his series the patient was reinfected in 1867, 1868, and 1870, and that between 1870 and 1874, during which time he had married and had two healthy children, he was reinfected two or three times. His health throughout was good. The original chancre was in 1863; the relapses were not followed by secondaries. Case 3 was only under observation a fortnight, the only evidence of reinfection being the indurated chancre. Case 4 recovered without treatment. Case 5 was only under observation one month, the symptoms of reinfection being the indurated sore and enlarged glands. Case 9 is said to have recovered without treatment; he refused to take mercury, as he wished to see whether a man could have syphilis twice. The older writers on syphilis taught that a man might have syphilis over and over again.[6] Was this from their having observed examples of the lesion under discussion, or from their failure to comprehend the necessity for a long course of treatment during the original attack? In 1859 Ricord said "the indurated chancre never relapses and that the syphilitic diathesis is no more reproduced than any other kind of diathesis." In 1872 he qualified this by saying that, though possible, like a second attack of variola, yet in his long experience he had never come across an instance of a man having an indurated sore and secondary syphilis more than once in his life, and that so long as the patient is suffering under the syphilitic diathesis arising from an indurated chancre he cannot have another indurated chancre, nor while a man has secondaries can he have a chancre of an indurated character. Mr. Gascoyen and Follin, in that they regarded the induration of the chancre as pathognomonic of syphilis, would have regarded all the cases I have quoted as examples of re-infection. In 1873 Mr. Gascoyen said "that the presence of induration about a sore shows, in the first place, that the system was free from syphilis when the induration was acquired; and, secondly, it shows that the patient is at the time under the influence of syphilis." And again: "The formation of an induration in a man who has previously had syphilis is a proof that he has recovered from the previous attack." In my cases Nos. 1, 6, 14, 15, 16, 17, and 18 denied all possibility of re-infection; and in Cases 1, 2, 3, 12, 14, 16, and 18 the re-indurations occurred whilst the patients were still under treatment for the primary attack. Mr. Henry Lee said that a man might have syphilis twice, but that so long as he remains syphilitic he is incapable of being re-infected and considered the amygdaloid condition of the glands as the great proof that a person was still syphilitic unless he had passed into the tertiary stage. In my Cases 3, 12, and 14 the inguinal glands re-indurated with the relapse of induration in the chancres, yet the patient in each of these cases was still under treatment for the original attack. In the Harveian Lecture for 1877 Mr. James R. Lane said that a man does not contract a second indurated sore so long as he is under the influence of the syphilitic diathesis. Mr. Venning[7] said that when the indurated glands had disappeared, then and then only was the patient free from syphilis and again in a condition for re-infection. Mr. Hutchinson says that for a man to have a second attack of syphilis it is necessary that he should be cured of the first in so far as it is a blood disease, and insomuch as he considers the lesions under discussion occur within a short time of the original infection he does not allow that these cases are examples of re-infection. Further, he says that cases of relapsing chancre are rare, though they are infinitely commoner than second attacks of syphilis. Ricord, Sigismund, and Bumstead[8] all lay particular stress on the amygdaloid condition of the inguinal glands as evidence of syphilis. On reference to my cases it will be seen that in Case 4 the glands became re-indurated seven years after the original attack, in Case 8 three and three-quarter years, and in Case 9 four years, with no further symptoms of syphilis except herpes. Drysdale[9] said that for twenty years he had looked for cases of reinfection and found none. Mr. Edward Cotterell, in his paper read before the British Medical Association in 1895 on Syphilitic Antitoxin, says: "One attack of syphilis confers immunity from subsequent infection upon the individual affected, the exceptions to this rule being so rare that they may be entirely disregarded." In THE LANCET of March 10th, 1877, Mr. Henry Smith recorded a most interesting case which occurred in King's College Hospital. A man aged sixty-five years was admitted for epithelioma of the penis. Seven years previously he had contracted a chancre, which was followed by secondary symptoms. He was treated by a druggist and the chancre healed. It relapsed one year later in the original site after a drinking bout. It healed in three weeks and has relapsed four or five times since, always after heavy drinking. Sometimes he was treated, at others not. Secondary rashes appeared four or five times, not always as a direct sequence of the chancre. There had been no fresh intercourse. This case seems to illustrate two points so strenuously insisted upon by M. Fournier: (1) pseudo-chancres are often followed by secondary symptoms; (2) pseudo-chancres are especially prone to occur in patients who are careless or negligent about treatment; and (3) it bears out Sir William Gull's well-known aphorism, "If you wish to keep your syphilis preserve it in alcohol."

May these pseudo-chancres be considered as in any way analogous to the relapsing inflammations of Sir James Paget? Writing of these Sir James Paget says: "Relapsing inflammations are due to the disturbed or interrupted nutrition, not only of the tissues deteriorated in previous inflammations, but of the new materials that were formed among them." M. Fournier suggested that we should consider these lesions

[5] A Treatise on Venereal Disease, 1786, p. 265
[6] Hutchinson, loc. cit., p. 16.
[7] THE LANCET, Dec 19th, 1874.
[8] Berkeley Hill: Syphilis, 1868, p. 77.
[9] Brit. Med. Jour., 1872

as belonging to constitutional manifestations of a special form, having their origin and their cause in the primary infection and absolutely independent of all further contagion. Taking into consideration how seldom these pseudo-chancres are followed by secondary symptoms (Mr. Hutchinson[10] says never), and the cases I have given agree with this except Cases 10, 12, 15, and 20, in which the relapse occurred quite early in the disease, thereby seeming to show that the presence of the relapses did not influence either way the onset of secondary symptoms, it seems that an explanation of these lesions might be found in combining the theory of M. Fournier with that of Sir James Paget on relapsing inflammations—viz., that we should consider these pseudo-chancres as due to the disturbed or interrupted nutrition of the new materials that were formed among the tissues deteriorated in the previous inflammations and that they owe their peculiar likeness to the infecting sore because they had their origin and their cause in the primary infection and are now absolutely independent of all further contagion.

The cases I have quoted seem to me to show: 1. That the indurated pseudo-chancre may appear at any interval after the initial lesion. 2. That if the interval of immunity has been a long one the indurated pseudo-chancre is not followed by secondary symptoms. 3. That if the interval between the appearance of the pseudo-chancre and the original sore is a short one, the onset of secondary symptoms is not influenced in any way by the new sore. 4. That these lesions may arise spontaneously quite apart from fresh intercourse. 5. That if the history be not known it is almost impossible to diagnose the pseudo-chancre from the initial lesion of syphilis. 6. That the predominant secondary symptom in the original syphilitic attack in the cases I have quoted was some affection of the mouth and throat rather than cutaneous eruptions. 7. That the presence of induration in a sore, accompanied it may be by induration of the neighbouring lymphatic glands, does not necessarily imply that the individual has been re-infected with syphilis. 8. That these lesions yield rapidly to mercurial treatment or even spontaneously disappear. 9. That these pseudo-chancres are not syphilitic, though occurring in individuals who are or have been the subjects of syphilis. 10. That, as the case I have quoted under the care of the late Mr. Henry Smith shows, these lesions may eventually terminate in malignant disease. 11. As Mr. Hutchinson has pointed out:[11] "The knowledge of the facts as to the recurring chancres is of very great importance, since without it very serious mistakes may occur, not only as regards treatment, but in reference to social and medico-legal questions."

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ON CONSTIPATION AND DIARRHŒA.[1]

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THE subject of Constipation and Diarrhœa is one that is interesting to every medical man because, I suppose, there are no other ailments for which he is so often consulted. Constipation especially is so exceedingly common in civilised communities that I think we ought hardly to look upon it as a disease. We find it amongst the strongest, the healthiest, and the longest lived of our people, and although they suffer from it and therefore ask for aid from medical men it is probable that we should regard constipation really as the reaction of a healthy organism to unfavourable surroundings. The unfavourable, or unnatural, surroundings may be said to be, too soft food, too little water, or too little exercise. There are no doubt many other conditions which tend to bring about constipation, but these three may, I think, be looked upon as the chief factors in the production of chronic constipation. Primitive communities take food which is not only rather hard and generally imperfectly cooked but leaves a considerable amount of indigestible residue. In our school-days we used to read how Cæsar and his troops carried with them little hand-mills and bags of corn or of wheat. The corn or wheat was put into the hand mill and roughly ground. In this way the grain was imperfectly broken up and so taken by the soldiers. Amongst uncivilised communities at the present day it may be simply pounded. In civilised countries, however, we have mills which not only grind the corn very finely, but separate the outer and more indigestible part of the grain from the starch which constitutes the interior of the grain. We thus get rid, by the perfection of our machinery, of those parts of the grain which would leave in the bowel undissolved residues and which would act thereby as a mechanical stimulus to the peristaltic action of the bowels. Similarly in regard to fruits and vegetables; we are accustomed to take them not in their crude state, but well cooked, and if there are any indigestible parts either in the vegetables or in the fruits these are generally removed.

Soft food, then, is one of the first causes of constipation, and in trying to treat constipation one of the first means to which we have recourse is to bring our patients back to the conditions under which less civilised nations usually live. We advise them to take bread either consisting of whole meal or with a greater or less admixture of bran. We advise them to take vegetables in abundance, either cooked, such as cabbage, spinach, brocoli, Brussels sprouts, cauliflower, carrots, turnips, parsnips, and the like, or we advise them to take vegetables such as tomatoes, celery, and so on, raw as well as cooked. In America it is very common indeed for people to begin or finish their breakfast with a slice or two of raw tomato or a slice or two of melon, and these fruits very often are sufficient to keep the bowels open. In this country we not infrequently recommend patients to take in the morning a raw apple or two, suck an orange or two, or eat a fig on an empty stomach before breakfast, and here also we very frequently find that we get the desired result. One of the most common of the fruits we prescribe is stewed prunes, and frequently these keep the bowels open, or a stewed or roasted apple or two may do so also. Many patients, however, find that even stewed prunes are insufficient to keep the bowels open, and in such cases one may succeed in getting a regular movement by simply taking some senna leaves, tying them in a muslin bag and putting them into the pan beside the prunes to be stewed. This very simple plan has in some cases that I have had under treatment succeeded when the ordinary method of just recommending stewed prunes has proved insufficient.

Fruits also contain, as a rule, salts of vegetable acids and many of them contain sugars, and both these salts and the sugars are of importance as laxatives. In the case of a fig, we find that there are three kinds of laxative properties: there is (1) the mechanical irritation due to the altogether indigestible seeds; (2) the stimulus given by the vegetable salts contained in the fig; and (3) the stimulus given to the bowel by the sugars.

Sugars in themselves are useful laxatives, and golden syrup, honey, or still better, perhaps, the old-fashioned black treacle, are very useful laxatives, and they may be given—at least the syrup and the treacle may be given—along with oatmeal porridge in the morning. Honey, treacle, or syrup may be given spread upon bread or the latter two may be mixed with the bread to form ginger-bread, and in all these ways they prove very useful laxatives. Vegetable jellies taken with bread are less efficient, but vegetable jams are very useful, because in them we find a mechanical stimulus is given by the seeds or by the skins which the jams contain. A very favourite addition to the breakfast table is marmalade, which contains vegetable salts, sugar, and also the hard skin of the orange cut up into small pieces, which are rather indigestible and give a mechanical stimulus to the bowel.

Water, insufficient in *quantity*, or abnormal in quality, is also a cause of constipation. We find that civilised people are very often in the habit as it were of cheating the natural desire for water by taking wine, and many people, especially ladies, are in the habit of taking less water than they like because if they drink more water it will pass through the kidneys and the exigencies of society may prevent them from emptying the bladder as frequently as they would wish, and, therefore, they get into the habit of taking much less water than is advisable. A dryness of the bowel constantly results from this, the fæces become dryer and harder, and so constipation occurs. This constipation may frequently be lessened by simply allowing the patient to drink a large tumblerful of hot water or even of cold water, according to

[10] Lettsomian Lectures, 1886.

[11] Loc. cit., p. 124.

[1] A paper read before the Brixton Medical Society at 125, Kennington-park-road, on Thursday, Jan. 16th, 1896.

the season of the year, on rising in the morning, and sometimes a similar tumblerful of water taken just before going to bed aids the action of the bowels.

A wrong *quality* of the water is a frequent cause of constipation, and people living on a chalky soil and drinking hard water are very apt to suffer from this trouble. Where this is the case the patient should drink some of the ordinary bottled waters, such as soda water, potash water, or aerated waters generally. Not only should they drink this, but they should have their tea made with these waters instead of with the ordinary chalky water, as the quantity of lime in the water taken as tea is sufficient in some people, if the water be very chalky, to keep up the constipation, which will be relieved if the water taken in the form of tea be free from lime. It is very difficult for patients supplied with hard water to get their food cooked with water free from lime, and the only thing one can do is to advise them if possible to secure soft water for cooking purposes, for they will not use bottled waters on account of the expense.

Another very important point in the cure of constipation is habit, and this habit is also of great importance in regard to the production of constipation. The bowels usually tend to act once in twenty-four hours and generally nearly at the same time in the day. If a person who is accustomed to evacuate the bowels regularly omits to do so in consequence of having to hurry away somewhere or having some engagement which prevents him from going to the closet at the accustomed hour he is apt to break the habit, and it is sometimes much more easy to lose the habit than to regain it. It is very essential that the patient should go to the closet as nearly as possible at the very minute by the clock, and he should, if possible, go after breakfast; for, as Cash has shown, the introduction of food into the stomach, especially after the long fast during the night, tends to cause a peristaltic movement of the intestines, which brings some of the fæcal matter from the sigmoid flexure down into the rectum and tends to cause an evacuation. However, this regular time is in some cases impracticable in the morning on account of the calls of business which make the man leave his house quickly to catch a train to the city, or from other reasons. In such cases the bowels should be evacuated at bedtime or at some hour of the day when regularity can be secured. In cases where the patient suffers from hæmorrhoids or a tendency to prolapse it is much better that the evening should be selected so that the bowels shall be evacuated just before going to bed, because in persons suffering from hæmorrhoids or a tendency to prolapse there is apt to be a feeling of great discomfort consecutive to the movement of the bowels, and if the movement occurs in the morning they suffer from this discomfort the whole of the day. If the bowels are emptied just before retiring to bed they can wash the parts, return the hæmorrhoids or bowel, then go to bed, lie quiet and comfortable, and in the morning all trace of discomfort has passed away.

Exercise has a good deal to do with the movements of the bowels. Deficiency of exercise tends to cause constipation, partly, I believe, because the bowels do not get a mechanical stimulus applied to them by the contraction of the abdominal muscles. So that, as a rule, we advise our patients to take exercise; but a great many people will not take exercise, and I think a number of people cannot do so. In such cases we may supply its place by the use of massage, and massage to the abdomen certainly will counteract the tendency to constipation. In many persons the advantage of massage over ordinary exercise is that in massage the stimulus is applied not merely to the abdominal muscles themselves but really also to the bowels below, and it may be applied in various ways. There is first of all the massage which the patient himself may use. In sitting at stool and trying to elicit an evacuation he may simply with the ball of the left thumb press downward along the course of the descending colon and sigmoid flexure, pressing pretty deeply in when he comes nearly to the pubic arch. This action is useful even during the evacuation. Another action the patient may practise himself is rubbing the bowel gently onwards in the direction of the hands of a watch, and sometimes it is of advantage to use the fingers with a rotatory motion from the right iliac fossa upwards along the course of the ascending colon, across the transverse and then down the descending colon and sigmoid flexure.

There is one class of patients in whom I think exercise is disadvantageous. You will frequently find delicate women, especially those who have got some sort ovarian or uterine irritation, who tell you that the more exercise, particularly walking exercise they take, the more obstinate the constipation becomes, whereas when they lie quiet they are perfectly well. In such cases I believe there is a reflex inhibition of the peristaltic movements of the bowels from the irritated ovaries or uterus, and in some of these patients you may get an evacuation occurring from a remedy which is one of the last, possibly, you would think of employing—viz., opium. My attention was first directed to this by the case of a woman who was under the care of my friend, Dr. Litteljohn. The bowels were obstinate and my friend prescribed half a grain of opium so as to try to lessen the pain which she was suffering from an inflamed ovary. To his astonishment she got after the opium a natural evacuation, which she had not had for a long time before. Following on this I made a somewhat extensive trial amongst my out-patients at St. Bartholomew's Hospital, but the results I got were very uncertain. In some cases it acted, but in others there was no action at all. It is quite possible—indeed, it is probable—that some of the cases were unsuitable for it. In one private case I did not know exactly what dose to give, and I prescribed one minim of the tincture of opium every night. A week afterwards I had a report from the patient's husband to say his wife was no better. I replied "double the quantity." In a few days the report came, "she is rather worse." I then wrote to say "give her half the first dose." Three or four days afterwards I had a letter to say that the last medicine acted well, if anything a little too violently. I have never been able to make up my mind as to whether this result was due to suggestion, like the aperient action of a bread pill, or was actually due to the action of the drug. I am inclined to think it was actually due to the drug because the suggestion had been clearly applied to her mind by the one minim and the two minims and these did no good first of all and later did harm, while the half-minim dose caused an active evacuation of the bowels. At first it seems an absurdity to ascribe this action to the opium, but when one comes to think of the complex nature of the innervation of the intestine where there are at least two different systems of nerves—one which stops movement in the intestine and another which increases movement—one sees that it comes to be simply a question of a shifting of the action of a very delicate balance.

Another point that I wish to mention is the action of the floor of the pelvis in defæcation. In defæcation the contents of the intestine are passed onwards by its peristaltic movement, but this action is aided by the abdominal muscles which tend to press out the contents of the rectum in much the same way as they tend to press out the child in childbirth. But we all know that in childbirth the head of the child is driven not against the opening of the vulva, but behind it, so that the head of the child must be turned forward by the pressure of the perineum, frequently aided by the hand of the accoucheur. In the same way the muscles of the abdominal wall will press the fæcal mass backwards, not directly towards the anus, but behind it, in a line that would almost strike the tip of the coccyx, and if the finger be placed under the tip during the effort of straining this pressure is easily felt. Where the pelvic floor is very lax, as it is in women who have borne many children, you may find that the fæcal masses will accumulate in the rectum and form there a big accumulation, and the floor of the pelvis is so loose that it will not press them forwards so as to evacuate them through the anus. One great hindrance to complete evacuation of the rectum is the position adopted in this country during defæcation—i.e., sitting upon what is practically a chair with an opening in it. In nearly all other countries, and in all uncivilised places, where the bowels are moved in the open air, the position adopted is that of crouching with the knees somewhat apart. This position tends to cause a certain amount of stretching of the floor of the pelvis and to afford support to the fæcal mass as it is driven backwards by the action of the abdominal muscles. In cases where the patient must use the closet, a certain amount of tension is often imparted involuntarily to the pelvic floor by the patient leaning forwards at an acute angle. But this is not so good as the crouching position, and in patients who suffer from a lax condition of the pelvic floor it is advisable to tell them not to use the ordinary seat in the closet at all, but to keep a chamber-pot in the closet and sit over it in the normal crouching attitude. Sometimes great help is afforded by the patient putting the fingers just beside and a little in front

of the coccyx so as to support the pelvic floor and give a little pressure to the fæcal masses so that they may pass forwards through the anus in very much the same way as the accoucheur would support the head during parturition.

In some cases hydropathic treatment is very useful. The essentials of the hydropathic treatment are simply the application of wet compresses to the abdomen two or three times a day and sitz baths, cold in the summer and the chill taken off in winter. These must be followed or accompanied by exercise and drinking water, so that it is almost impossible to get the full effect of the therapeutic measures in a patient who is being treated at home.

Time would fail me to discuss the question of what medicines given by the mouth are best in constipation, of purgatives, of laxatives, of breakfast-pills, of dinner-pills, &c., and, moreover, they are most fully discussed in text-books and papers innumerable, and I shall, therefore, pass them over and proceed to discuss some points in regard to diarrhœa. I shall also pass over the ordinary

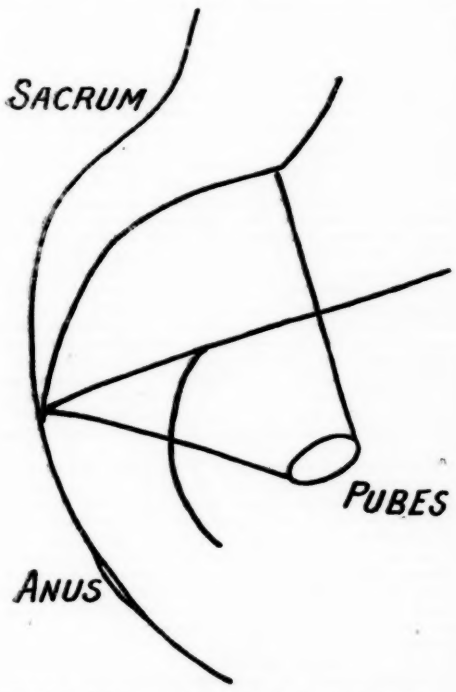

Diagram showing axis of pelvis and direction of pressure by abdominal muscles (after Cazeaux, Traité Théorique et Pratique des Accouchements.)

diarrhœa due to irritation of the intestine by the intestinal contents or by the decomposition of food, &c. I will simply draw attention to one method of stopping diarrhœa which is applied in various ways when the diarrhœa is due to decomposition of the intestinal contents by bacteria. The decomposition may be arrested and the diarrhœa stopped by simply starving the bacteria out. Thus where you find bacilli thriving upon certain diets you put the patient on an entirely different diet, and so get rid of the bacteria which have been living upon other foods. If a patient has been on a flesh diet and that has not succeeded, you put him on a farinaceous diet. Again, you may find that in certain children a farinaceous diet, or even a milk diet, is not successful, and you then put them on a meat diet, raw-meat juice, &c., and in this way starve out the bacteria which were causing decomposition of the milk or farinaceous food, so that when the ordinary food is again resumed the decomposing bacteria have been starved out and no decomposition will occur in the intestine.

I would also draw your attention to the excellent results which follow treatment by an entirely milk diet, particularly in patients coming from India and Afghanistan with chronic diarrhœa, and where every other method is utterly useless. As my friend Sir Joseph Fayrer has shown these cases must be treated just as one would treat a case of typhoid fever—viz., by milk, and nothing else whatever in the way of food. In some cases the patient even lays on flesh and is able to attend to his work, but this is not the general rule, as they usually have to be kept quiet in bed while they are on the milk diet.

I would next draw attention to an obstinate form of diarrhœa met with in connexion with irritability of the sigmoid flexure. It is a form of diarrhœa that is very often known as "morning diarrhœa." The patient has to get up very early in the morning, and perhaps has three to six movements before 11 A.M. After that he is pretty free, and probably after midday he has no action at all until next morning. This form of diarrhœa is sometimes not so severe, and occurs only in the shape of one movement just after breakfast, followed by one or two loose motions within the next hour or so, but both the severe form and the mild are by no means amenable to treatment. We give our patients opium, astringents, and sedatives such as bismuth, until we are tired, and yet by the simple means of regulating the diet results are obtained which cannot be got by ordinary remedies. The remedy is this: Tell them to take no liquid after five o'clock in the afternoon. It would seem that in such cases liquid taken after five or six o'clock tends to accumulate in the stomach or in the bowel, and it acts just in the same way as if the patient were to take a large dose of Carlsbad salts in the morning. In some of these cases dilatation of the stomach is present, but I do not think it is present in all. In all the cases I have met with I have got distinct improvement, and in many complete cure, by this simple regulation of taking no fluid after 5 P.M.

There is another form of diarrhœa the cause of which, I think, is often unobserved, and that is diarrhœa of a chronic irritating character; small motions but numerous and often accompanied with tenesmus, which is due to a prolapse of the sigmoid flexure into the rectum. As you know, the rectum is pretty firmly fixed to the bones of the pelvis, especially to the sacrum, so that although prolapse of the rectum through the anus is common in children, prolapse of the rectum is by no means very common in adults. But prolapse of the sigmoid flexure into the rectum is by no means uncommon in adults, and it sometimes gives rise to constipation, but frequently causes chronic diarrhœa. My attention was drawn to this very markedly in a patient whom I saw some years ago—a tea-planter who had come from Assam. He had suffered from chronic diarrhœa for from six months to a year before I saw him. The whole of his trouble dated from an attack of violent constipation which had lasted many days. To relieve this he took a strong purgative, and from the moment that this acted he had suffered from diarrhœa. All the remedies he had tried had failed. On examination by the bowel I found almost exactly the same condition as you would find in a child with a prolapsed rectum, only in this case the prolapse was as far up the rectum as one could reach with the finger. I found high up in the rectum regular bags of mucous membrane hanging down, and in the middle of these bags one could feel the opening into the sigmoid flexure. This man was treated chiefly by water enemata to keep the contents of the sigmoid flexure soft and by the application of catechu so as to exercise an astringent action upon the rectum. By carefully regulating the diet, so as to avoid hard irritating substances coming down from the sigmoid flexure, by keeping the fæcal masses in the sigmoid flexure quite soft so that there should be no mechanical pressure, and by injecting an astringent lotion (about two ounces of water to a drachm of tincture of catechu) into the bowel after each motion and retaining it as long as possible the patient was completely cured of the diarrhœa in a few months.

There is one other cause of diarrhœa to which I must draw attention and that is diarrhœa from malignant disease. The operation of examining the bowel is a disagreeable one both for the operator and for the patient, and for this reason it is frequently omitted. But in all cases of chronic diarrhœa I think it ought to be done. I have known several cases in which its omission has proved very disadvantageous to the patient. In one case which I have seen a woman had suffered from diarrhœa for two years. All that time she had been under constant treatment, but no examination of the bowel had been made, and I am sorry to say that

when I did examine the bowel I found malignant disease, which rendered colotomy necessary in about ten days. Another patient came to me for neuralgia of the perineum, and there again I found malignant disease of the rectum. Yet another patient came to me who said she was suffering from a little bilious attack and tendency to constipation. She looked so well, and all her friends said she was so well, that I did not at once make an examination; but later she told me she was passing a little mucus occasionally tinged with blood, and therefore I made an examination and found malignant disease of the rectum. Perhaps I would hardly have laid such stress upon this, but just before I came here to-day I saw a poor woman who had come to me in very much the same condition and not suspecting anything, but on examination I found there was malignant disease, and a colotomy was performed yesterday. In such cases colotomy is only capable of affording temporary relief. Whether, later, surgery will improve so far that the operation which has been done once or twice without much success will be successful one cannot say. I mean the operation of cutting a bit out of the bowel and sewing the two ends together. As a rule this has not been successful, but there is no reason why it should not be successful; and I think that if surgery advances in the next ten years as it has done during the last ten years in all probability it will be successful and that we shall save our patients' lives under circumstances where at present we are forced to say that the case is hopeless.

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GLEANINGS FROM SURGICAL PRACTICE.

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VII.[1]—OCCLUSION OF ARTERIES THE RESULT OF INJURY.

WHEN a surgeon is called to a case of injury to a limb—and for the moment I will assume it to be a lower extremity—over the upper part of which a heavily-weighted cart-wheel has passed, or to which some other crushing force has been applied, he naturally looks to its pulses, and if he finds they are all absent below the seat of injury he as naturally asks himself in what way an artery may be so damaged by a crushing force as to bring about its occlusion temporarily or permanently. If he happens to be well up in his subject he will know that an artery by a local contusing or stretching force may, in rare instances, become obstructed by hæmorrhage into its sheath, the effused blood mechanically so pressing the walls of the vessel together as to close its lumen, and that in military surgery this condition is fully recognised. In the Army Medical Museum, Washington, United States, Specimen 2114 demonstrates its truth. He will, however, also know that by far the most common consequence of a contusing or stretching force when applied to an artery is a more or less complete rupture of its internal or of its internal and middle coats; and when the external coat of the vessel is left intact—a common condition—these ruptured inner coats recurve and, forming an obstruction to the arterial flow, favour the formation of a blood-clot in the same way as in an artery completely divided by traction, or when divided and secured by torsion hæmorrhage is known to be prevented or arrested. If the inner coat or coats of a large artery are but partially torn the obstruction will not be complete and may be only temporary; if they are wholly torn and are healthy they will recurve in a valvular fashion; if they are wholly torn and diseased they will break up irregularly; but under both conditions they will form an obstruction to the flow of blood, help to bring about the formation of a blood-clot at the seat of injury, and so permanently to occlude the vessel, in the same way, as is now so well known, that torsion brings about the same results in a divided artery. If in the case before him the surgeon finds no evidence of a ruptured vessel or that the blood which has been effused is neither in quantity nor from its position competent to act as a compressing medium with sufficient power to cause arterial obstruction; if there are no displaced bones or fragments of bones which are capable of bringing this about, he must come to the conclusion that the serious condition he has to treat is one of obstructed artery from injury of its inner and middle coats as already described. Further thought will also tell him that the danger of the case is similar to that which has to be faced in all other examples of obstructed arteries from whatever cause, and that gangrene of the part which has been deprived of its arterial supply is the chief fear. If fracture or dislocation of a bone is found to complicate the case, its dangers are neither lessened nor altered in character, although the diagnosis of the true condition of the non-pulsating artery may not be clear. Indeed, when with a fracture or dislocation there is evidence, by the absence of pulsation in the main artery of a limb below the seat of fracture, that the arterial blood current is not passing, many questions at once arise, and the surgeon asks, Is it that the vessel is obstructed by partial rupture of its inner coats, as already alluded to, and that the outer coat is still intact? Is it that the artery is torn or divided with or without its associated veins? or is it that the vessels are simply pressed upon by effused blood, arterial or venous? or by displaced bone? When there is much effusion of blood into the tissues, and this effusion is deeply placed beneath a tense fascia, as in the leg, and no pulsation can be felt or bruit heard in the swelling to suggest arterial rupture, it is quite impossible to make out with any clearness the true condition of affairs or to which of the causes mentioned the obstruction may be due. Under these circumstances the treatment of the cases must be expectant, and on looking back upon past experience, and more particularly in the treatment of fractures of the leg, I can recall very many instances of this kind in which this difficulty was present and in which an expectant attitude gave a good result. Indeed, this was the case in by far the larger proportion of cases treated, and consequently the diagnosis of the exact condition of the vessels was not made out. Where the pulsation in the tibial vessels soon returned it is reasonable to believe that the vessels were in themselves intact and were occluded by outside pressure. Where the pulsation slowly returned after the lapse of many weeks the arteries had probably been organically injured and obstructed for a time. When pulsation failed to be restored it was probable that the vessels had been partially if not wholly ruptured and obstructed. Under all circumstances, however, an expectant attitude is the right one to assume in the treatment of these cases.

Before I pass on to illustrate this subject by the quotation of cases I must add that it should not be forgotten that the inner or middle coats of an artery may be so partially torn as not to be followed by the formation of a thrombus, or as a consequence obstruction to its lumen, but that as a result of the tear what is known as a dissecting aneurysm may form by the blood current finding its way between the ruptured coats and so separating them as to give rise to this rare variety of aneurysmal disease. In still rarer cases where obstruction is not complete the force of the blood may so dilate the external coat of the injured artery as to form a sacculated aneurysm.

CASE 3. *Laceration of the inner coat of the aorta, with fracture of the spine and laceration of the jejunum.*—An example of partial rupture of the aorta came under my observation in 1873 in a patient under the care of Mr. Durham. It was in a boy aged fourteen years who was admitted to hospital collapsed and dying with some abdominal injury which had been caused by the passage of a cart-wheel over his abdomen. He died a few hours after his admission. At the necropsy a complete separation of the first lumbar vertebra with its cartilage from the second vertebra was found to exist, and the cartilage had attached to it minute portions of spongy bone where torn from the second vertebra. The upper articular facets of the arch of the second lumbar vertebra were also broken off. The jejunum was found to have been separated from the duodenum and extravasation of fæces had taken place. There was some blood effused behind the peritoneum in front of the spinal fracture, and two slight lacerations of the liver on its anterior edge. At the level of the inferior mesenteric artery the inner surface of the aorta was torn transversely for half an inch across its inner coat. What the effect of this aortic laceration would have been is a problem which cannot now be solved. It may have led to the formation of a dissecting aneurysm in the way described or to the formation of a thrombus, and possibly the tear might have been repaired.

I will now pass on and illustrate this interesting subject

[1] Nos. I., II., III., IV., V., and VI. were published in THE LANCET of Nov. 2nd and 9th, Dec. 7th, 1895; Jan. 11th, Feb. 8th, and May 9th, 1896, respectively.

of the occlusion of arteries by the quotation of cases, and in so doing shall commence with examples drawn from injuries in the upper extremity; for I have before me the notes of four cases of obstructed brachial and one of obstructed axillary arteries. One was the consequence of a crush, but was not complicated with wound or fracture. Another was associated with displacement of the forearm and lower epiphysis of the humerus backwards. Two were complicated with fracture of the humerus, and one with a lacerated wound into the axilla. All five recovered. The first case I shall give will be one of occlusion of the brachial artery the result of a crush.

CASE 4. *Contusion of arm; occlusion of the brachial artery; recovery.*—A man aged thirty-two years was admitted into Guy's Hospital on June 25th, 1875, having had his arm crushed between the buffers of two railway trucks. On examination no bones were found to have been broken, but the whole limb was much swollen and ecchymosed from the hand to the axilla, clearly from effused blood, and there was neither pulsation nor arterial thrill in any of the arteries of the limb. The arm likewise was cold. The expectant treatment was adopted. The arm was wrapped in cotton wool, placed on a splint, and raised slightly. To it gentle pressure was applied by means of a bandage. The swelling gradually subsided. In three weeks pulsation returned in the radial artery; in six weeks the arm was comfortable, but no pulsation ever reappeared in the brachial artery. Whether the brachial artery was torn across or only obstructed in one of the ways previously described must be an open question. I am disposed to take the latter view, although in a case I shall next quote in which the axillary artery was clearly torn across an equally good result ensued.

CASE 5. *Lacerated and obstructed axillary artery in a boy aged eight years; good recovery.*—A boy aged eight years many years ago was brought into Guy's Hospital, under the care of the late Mr. Hilton, with a lacerated wound on the inner side of his arm extending into the axilla which had been caused by his falling from some height on to a spike of an iron railing. He was brought to Guy's Hospital in a collapsed condition with this gaping wound, which I had an opportunity of seeing soon after his admission. The axillary artery had evidently been torn across, for its two separated ends were visible, and the upper pulsated. There was no pulsation in any of the vessels of the arm below the seat of injury. The wound was treated as was then customary and the arm was kept warm with wool and slightly elevated. The artery was not touched. A steady repair ensued and the wound healed in five or six weeks; by that time a pulsation in the wrist was made out. In this case all bleeding was prevented by the laceration of the axillary artery, and I hold that the practice which was adopted was the right one, although every surgeon should before he adopts a like line of treatment satisfy himself that the lacerated end was secure. I have seen a case in which the superficial femoral artery was torn across in a like way associated with a severe fracture of the femur, which was likewise left to nature, and a good recovery ensued. It occurred in the practice of the late Mr. Bransby Cooper.

CASE 6. *Separation of the lower epiphysis of the humerus from the diaphysis and displacement of the epiphysis with the bones of the forearm backwards; occlusion of the brachial artery.*—A boy aged five years was admitted into Guy's Hospital on May 27th, 1878, under my care, having injured his elbow one week previously in falling down stairs. The limb was cold, swollen, and pulseless below the elbow. The forearm with the lower epiphysis of the humerus was displaced backwards, and the anterior edge of the extremity of the diaphysis was pressing seriously upon the brachial artery, which was in front. When the deformity was reduced pulsation did not return in the vessel. The limb was put into a good position and fastened in a splint after having been raised and well wrapped up in cotton-wool; everything went on well. Subsequently, on the seventeenth day after his admission, or the twenty-fourth day after the accident, pulsation returned in the radial artery, but when the child left the hospital in the sixth week no pulsation had returned in the brachial artery below the seat of injury. At that spot the vessel was clearly occluded.

CASE 7. *Compound fracture of the humerus, with occlusion of the brachial artery; good recovery.*—A woman aged forty-three years was run over on Oct. 31st, 1887, and subsequently admitted into Guy's Hospital under my care with a compound fracture of the humerus about its middle third and absence of pulsation in the brachial artery with its branches. The wound was a lacerated one, as the accident was brought about by the passage of a cart-wheel over the limb. The wound was well washed with iodine water, and dressed with iodoform gauze and mercuric wood wool tissue. The arm was put up in splints, which included the forearm, after having been well wrapped in cotton-wool, and a good recovery followed. Fourteen weeks after the accident a feeble pulsation returned in the radial artery, but the brachial vessel was permanently occluded.

CASE 8. *Compound fracture of the humerus into the elbow-joint, with occlusion of the brachial artery; excellent recovery.*—A lad aged sixteen years was admitted into Guy's Hospital under my care on May 29th, 1873, the wheel of a van having passed over his arm above the elbow. The humerus was broken above the condyles, and there were two lacerated wounds into the elbow-joint exposing the inner condyle of the humerus and olecranon process of the ulna. There was no pulsation in any of the arteries below the centre of the brachial. The wound, having been well cleaned, was sealed with lint soaked in the compound tincture of benzoin—as was at that time my general practice—and the arm was put up in splints with the forearm well covered with cotton-wool and slightly raised. Everything went on well and quick union of wounds and bone followed. Every movement of the joint was retained, but pulsation never returned in the brachial artery, although it did in the vessels of the forearm some months later. The inner and middle coats of the brachial artery had been clearly ruptured in this case by the contusing force.

These three cases may be read together, although in Case 6 the obstruction to the brachial artery was probably due to the injury it had sustained by the forward pressure of the lower end of the diaphysis of the humerus, and the other two by the same force which had produced the fracture. In all three it is to be noted that a good recovery took place, and when the cases were under care I was apt to point out that it was more than probable that their well-doing was much influenced by the fact that the amount of blood which supplied the injured parts was somewhat less than it would have been had the vessel been patent; at any rate, it may be stated that in the three cases there was no temperature worth recording and a steady convalescence.

Cases of occlusion of the arteries of the lower extremity will now occupy my attention and it need not be said that such are of a far more serious nature than are those of the upper on account of the arteries being larger. I have five examples before me which I shall briefly quote.

CASE 9. *Contusion and occlusion of the external iliac and common femoral arteries; recovery.*—A man aged twenty-six years was admitted into Guy's Hospital on June 29th, 1875, with severe bruising of his abdomen from the umbilicus downwards to below Poupart's ligament and absence of pulsation in the right femoral and external iliac vessels, with coldness and numbness of the left foot, also with pain in the lumbar region. He had passed his urine without difficulty. It seemed that the day before his admission he had fallen off a pleasure van, and that the two side wheels of the van had passed over the lower part of the abdomen when he was lying on his back. He was treated by slight elevation of the injured limb, which was wrapped in cotton wool and placed in a splint. On the fourth day warmth had returned to the foot and feeble pulsation was felt in the anterior tibial artery. On the seventh day the whole limb was warm, and in five or six weeks the limb was natural, although the pulsation in the tibial arteries was not so strong as it was in the normal leg, and there was no pulsation in the external iliac or common femoral vessels.

CASE 10. *Ruptured popliteal artery; occluded artery.*—A man aged thirty-two years applied to Guy's Hospital on Aug. 5th, 1862, with extreme distension of his left leg up to the popliteal space and much pain. The swelling had come on rapidly when he was at work after a sudden pain and sound of a snap in his knee. He was admitted under the care of Mr. Birkett when I was his assistant. No pulsation was to be felt or heard in the arteries of the leg, but in the swelling the man felt pulsation like that of a clock. The limb was fixed on a splint, wrapped in cotton-wool, and slightly raised. In a few days the swelling began to subside and pain to diminish. On the fourteenth day the sensation of pulsation ceased and the swelling steadily diminished. At the end of three weeks the articular arteries about the knee were clearly enlarging and convalescence was soon re-established. Four months after leaving the hospital he reappeared with a deep abscess in the posterior and lower part of the left thigh.

When this was opened much broken-down blood escaped with pus; a good recovery followed. There was, however, no pulsation to be felt in the bloodvessels. The abscess was doubtless due to the breaking down of blood which had been effused at the time of the original accident and had not been reabsorbed.

CASE 11. *Fractured pelvis with obstruction of the external or common iliac artery; recovery.*—A man aged fifty-three years came under my care in 1873 after a severe hunting accident he had sustained two weeks previously in a fall from his horse with his horse on him. After the accident he passed much blood from the urethra and had to be relieved by the passage of a catheter. Any movement of the pelvis caused great pain, and this pain passed down his right leg, which was cold and numb. The scrotum was much swollen with the whole of the right groin and the lower part of his abdomen. When I saw him two weeks after the accident blood was still flowing from the urethra, but not from the bladder, and the passage of a catheter was easy. The right lower extremity was cold, pulseless, and swollen. The scrotum was much ecchymosed and the right ilium was evidently fractured from the anterior third of its crest downwards through the brim of the pelvis. No pulsation could be felt in the right external iliac artery as high as could be reached. A catheter was passed and fixed in; a bandage was secured round the pelvis after some strapping had been applied to fix the broken bone, and the right lower extremity was wrapped in cotton wool after it had been rubbed with the hand upwards when slightly elevated. It was then laid upon a splint with its lower end raised. Everything subsequently went on well. All urethral hæmorrhage ceased and swelling of the parts subsided. In six weeks the tibial vessels were felt pulsating and in another three the superficial femoral artery was evidently open. After convalescence was established no pulsation was ever detected in the external iliac or common femoral artery. In 1890, seventeen years after the accident, when the patient was seventy years of age, he married and was in excellent health. He would not admit that his right leg was colder than the left.

CASE 12. *Fracture of the pelvis; occlusion of the external iliac artery; gangrene of the foot and leg; amputation; death.*—A man aged twenty-one years was admitted into Guy's Hospital under my care on Feb. 15th, 1892, after having been knocked down by a piece of falling timber striking him on the right hip. When seen his hip and whole right lower extremity was much bruised, the discolouration including the right side of his pelvis and right iliac fossa. The ilium was fractured through the right pubic portion and the right iliac artery was evidently obstructed from the absence of all arterial pulsation in the vessels of the limb. In spite of careful treatment gangrene ensued and on March 14th, one month after his admission, amputation at the knee-joint was performed. The man, however, died on the 25th, eleven days later, from septicæmia. After death it was found that fracture of the pelvis had extended into the hip-joint. The external iliac artery at a point corresponding to the fracture of the brim of the pelvis was obstructed, the internal and middle coats of the vessel having been ruptured by some over-extension of the artery by the broken bone. The external coat was intact; within the artery, besides the recurved inner coats, there was a firm blood-clot above and below the injured part.

CASE 13.—*Fractured pelvis through the thyroid foramen; occlusion of the iliac artery; rupture of the urethra and partial rupture of the bladder.*—A youth aged twenty years was admitted into Guy's Hospital on July 17th, 1876, under the care of Mr. Forster, after having been crushed between the buffers of two railway carriages. When admitted there was an elastic, non-pulsatile swelling above the right Poupart's ligament, an absence of pulsation in the right femoral artery and its branches, a cold right foot, and a scalding pain down the right knee and leg. There was a wound close to the rectum through which a finger could be passed up to the symphysis and there was a large blood-clot in the rectum, but no wound could be felt in it. No fracture was then made out. The urethra was clearly ruptured and as a catheter could not be passed through the penis the perineum was laid open and the bladder emptied, its contents being like coffee grounds. The patient died thirty-six hours after the accident. At the post-mortem examination a fracture was found to have passed through the right pectineal eminence into the thyroid foramen, and a second through the ramus of the ischium. The symphysis pubis was separated and the coccyx transversely fractured. The urethra was torn across and the peritoneal coat of the bladder ruptured. The right external iliac artery for two inches was much bruised, and in slitting it up a clot was found in its interior. The two inner coats of the vessel had been ruptured and were curled up occluding the vessel. The external coat was intact.

In the last three cases it may reasonably be assumed that the external iliac artery was in each obstructed by the over-stretching of its coats upon a broken fragment of the pelvic bones. Indeed, in all cases of fracture of the pelvis the fear of this complication should ever be in the mind of the surgeon who has charge of the case; in Case 11 this fact was at first overlooked, and it was only when the effects of the injury showed themselves that I was consulted. Happily the case did well.

THE TREATMENT OF OCCLUDED ARTERIES.

That the ultimate consequences of an obstruction to a large artery of an extremity will greatly depend upon its treatment is a truism to which every surgeon should be alive, for it should be fully recognised that any want of appreciation of the requirements of a case of this nature is sure to be followed by injurious if not fatal consequences, whereas with due care good results may often be secured to both limb and life. A limb when suddenly deprived of its arterial blood-supply is more liable to become the subject of gangrene than when the process has been of a more gradual nature; primarily, from the sudden deprivation of its tissues of their natural nutriment—the blood; and secondarily from the blood stasis which invariably follows the accident, either as a consequence of the simultaneous injury to the accompanying veins of the injured artery or from the loss of the *vis a tergo* normally supplied by the heart through its arterial system, as well as of all the other forces which favour the venous flow,—the malposition of the affected limb after the accident, and particularly its dependent position, with want of care in other ways in its treatment, having a powerful influence on the result. The object of the surgeon in the treatment of any case of this kind is consequently to encourage in all ways the arterial as well as the venous circulation of the limb, and particularly to guard against anything like blood-stasis in the tissues. With these views he must place the limb—say the lower extremity—upon a splint to keep it quiet, after it has been carefully rubbed upwards and gently kneaded to encourage the flow of venous blood through the muscles and deeper parts, and care must be observed that this splint with the limb upon it is raised sufficiently, but not more than sufficiently, to help the return of venous blood to the heart, but not enough to interfere with the supply of arterial blood through the new arterial channels which have to be enlarged to compensate for the obstruction of the main vessel. The foot should consequently be not raised more than one or two inches higher than the knee, and the knee than the hip. To do more would militate much against the arterial supply becoming sufficient for the nourishment of the limb, and to do less would encourage blood-stasis. The limb from being deprived of its warm arterial blood-supply being cold requires warmth, but if this be supplied suddenly or at a too high degree more harm than good will follow its application, for by excess of warmth blood will be drawn to the part when the power of the tissues to pass it on is lost or almost lost, and the blood-stasis, which is so much to be dreaded, is thereby encouraged. The warmth should consequently be applied to the limb cautiously and not till the venous circulation of the limb has been helped by gentle rubbing upwards and kneading the deeper tissues with the warm hand, below the seat of injury. Subsequently the limb should be swathed in cotton-wool, several layers being used, and the whole be bound together with a flannel bandage, gentle pressure being applied by means of the bandage.

The general treatment of the case should be based upon the same requirements; everything like over stimulating should be avoided and simple nutritious food given. Wine and spirits must be administered with great caution. Should gangrene follow in spite of right treatment, amputation will be called for, but such a measure should not be hastily undertaken; indeed, it should not be performed until some indication is afforded to the surgeon of the extent to which the gangrene is likely to spread; until, in fact, some kind of line of demarcation can be made out, and then the amputation should be undertaken well above this line in healthy tissues.

In a case of this kind amputation need not, however, be performed so far from the line of demarcation as it is expedient to act in cases of senile gangrene, for in this latter affection the vessels of the limb are known to be diseased, whereas in those now under consideration the vessels in all probability are sound except at the seat of injury. If septic changes take place in the limb surgical interference may be hastened; but if the limb has been rightly treated and well raised it will probably wither up and become dry, whereas if the limb has become swollen and œdematous from blood stasis, from whatever cause, septic changes are sure to show themselves. Under the former circumstances, where the gangrene is of a dry form, delay is to be sanctioned; under the latter, where it is of the moist form, surgical interference will not only be called for at an early period, but have to be carried out under the most unfavourable conditions.

In the treatment of cases of fracture, simple or compound, complicated with obstructed arteries, an expectant attitude should, as a general rule, be observed, for in the majority of cases of this kind the limb is sufficiently well nourished to undergo repair and for good union of the bones to take place. It is in exceptional cases alone that gangrene follows and amputation is called for. Before I conclude this article I propose to quote the brief notes of seven cases, in each of which at some antecedent period a large artery had been obstructed by surgical methods and recovery had followed. The cases came before me for some independent surgical operation and speak for themselves. It is to be regretted that the reports are not as complete as could be wished, but they are worth recording even as they are.

CASE 14. *Ligature of the common carotid artery three years before.*—In 1863 a man came before me with a thecal abscess. He was in good health and had been so since Jan. 3rd, 1860, when the late Mr. le Gros Clarke had ligatured his common carotid artery for a wound into it, the result of a stab, at St. Thomas's Hospital.

CASE 15. *Ligature of the common carotid artery twenty years previously.*—In 1881 a man aged forty-one years was admitted into Guy's Hospital under the care of Dr. Wilks for tetanus, from which he died. Twenty years before—that is, in 1861—he was in the same hospital under Dr. Wilks for a sloughing throat, which was complicated with such arterial hæmorrhage as to call for the application of a ligature to the left common carotid artery by the late Mr. Cooper Forster. He rapidly recovered after the operation and had worked at his trade in good health ever since. At the post-mortem examination made by Dr. C. H. Fagge the left carotid was found to be small but easily dissected out, and retained the appearance of the artery externally. It was occluded by a firmish, delicate coagulum, which blocked the channel from the bifurcation into external and internal to one-third of an inch from its origin at the aorta. Its lower end was channeled for a line or so by a canal which showed when the lower end was inspected a central depression, but it did not go anywhere, although by its appearance it was expected that there had been a restoration of the canal (canalisation). The clot was of a delicate nature, and when the artery was opened and the clot separated from it there was very little coagulum left, a thin end of brownish colour and somewhat delicate consistency remained, which was more like connective tissue than clot. It was worthy of note, too, that the artery-wall looked quite healthy when the clot had been removed from it. It was thrown into longitudinal folds from contraction upon the contents, which insufficiently distended it. The coats still possessed, apparently, the yellow, tough consistency of arterial coat. The internal carotid was blocked in a similar manner to the common carotid, but the plugging was less complete, and Dr. Fagge was disposed to think that there had been some restoration of its circulation through the external carotid. At all events the common carotid had a small free passage into the internal carotid at the bifurcation, and the clot in the internal carotid was of such tenuity that he could not say the artery was quite blocked. A delicate coagulum extended as far as the base of the skull. The internal jugular vein seemed to be very small, not so large as the normal external jugular.

CASE 16.—*Fracture of the thigh in a man who had not completely recovered from a hemiplegic attack six years previously and had had his subclavian artery ligatured twenty-nine years previously for aneurysm.*—In 1855 a man aged sixty-four years was admitted into Guy's Hospital under the care of Mr. Birkett with a fracture of his right femur, which united well. Twenty-nine years previously he had had his subclavian artery tied for axillary aneurysm at St. Thomas's Hospital and was in good health subsequently up to six years before his admission into Guy's Hospital, when he had a fit and became hemiplegic on the right side—the side of the fracture—from which he never completely recovered.

CASE 17. *Death from rupture of an abdominal aneurysm in a man who about six years previously had been cured of a popliteal aneurysm by pressure.*—A man aged thirty-four years came under my care in December, 1880, with an abdominal aneurysm and also a popliteal aneurysm in his right lower extremity. He died suddenly soon after his admission from a rupture of the abdominal tumour. He had been under my care about six years previously for a popliteal aneurysm in his left leg and was cured by means of digital and instrumental pressure. He had been working at his trade up to a few days of his death. At the post-mortem examination much blood was found in the peritoneal cavity, and from the anterior wall of the abdominal aorta, between the renal arteries and involving the mouth of the cœliac axis and the superior mesenteric artery, there was an oval aperture leading into a thin-walled sac which was about the size of an orange; in its upper part this had ruptured. The specimen of the artery was removed for subsequent examination by the then registrar, Mr. Symonds.

CASE 18. *Thoracic aneurysm following the cure of a popliteal aneurysm two years previously by pressure.*—A man aged thirty-five years was admitted in 1881 into Guy's Hospital with an aortic aneurysm from which he died. In 1879—two years before—he had been treated by Mr. Durham for a popliteal aneurysm which was cured by pressure. The preparation, like the last, was taken away to be carefully examined, but the report has not yet, unfortunately, been completed.

CASE 19. *Case of cured aneurysm of a popliteal artery in a man who died nine months later from an aortic aneurysm.*—A man aged forty-three years was admitted in 1869 in a dying condition into Guy's Hospital from an aortic thoracic aneurysm. He had been in the London Hospital in July, 1868, and was there cured of a popliteal aneurysm by pressure. The necropsy was made by the late Dr. Moxon, and he reported that "the femoral artery at the seat of compression was quite healthy." The sac of the old aneurysm was the size of a small walnut and filled with a firmish clot of a reddish-brown colour, easily separable from the sac. The orifice into the sac was not made out, as it was in the line of section of the aneurysm.

CASE 20. *A man aged forty-seven years who nineteen and seventeen years previously had had his femoral arteries ligatured for popliteal aneurysms and had worked ever since as an orange porter.*—A man aged forty-seven years came to Guy's Hospital in December, 1860, for a sprained knee. In 1841, when he was twenty-eight years of age, or nineteen years before this note was taken, Mr. Bransby Cooper applied a ligature to his left femoral artery for popliteal aneurysm and two years later to the right femoral for the like affection. He rapidly recovered after both operations, and returned to his work as an orange porter, which he had followed up to the time of his accident.

THE SURGERY OF EMPYEMA,

WITH DESCRIPTION OF A NEW SELF-RETAINING EMPYEMA TUBE.[1]

BY CORNELIUS A. GRIFFITHS, F.R.C.S. ENG.

I SUPPOSE I may take it for granted that everyone will agree with my saying that when a patient presents the physical signs of fluid in the chest it is the imperative duty of the practitioner in attendance in the first place to find out the nature of that fluid and then to adopt measures for its removal, the particular means used being determined according to the amount and nature of the fluid present. The general physical signs of pleural effusion I need say nothing about. Concerning the differential diagnosis between serous and purulent effusion various statements have been

[1] Abstract of a paper read before the Cardiff Medical Society on Feb. 7th, 1896.

made with reference to the conduction of breath-sounds through the fluids. In cases of empyema which I have examined I have found that this auscultatory sign is by no means constant. In some cases I have found the breath-sounds well conducted, giving high-pitched tubular breathing, while in others there has been no conduction at all or a condition intermediate, in which faint distant breath-sounds have been heard; so that from my own experience I attach very little importance to the stethoscope in the differential diagnosis of pleural effusions.

As a practical surgeon I am content to leave these diagnostic niceties and resort at once to the simple and only absolutely reliable method of clearing up the diagnosis—by removing a sample of the fluid for examination by means of an exploring needle. For this purpose one should use a needle similar to, but longer and larger in the bore than, the ordinary hypodermic injection needle. I once, several years ago, used an ordinary hypodermic needle for this purpose and have never forgotten the lesson it taught me. I was acting as locum tenens for a friend and I had a young patient with the physical signs of fluid in the chest. I proceeded to explore the chest in order to confirm my diagnosis and see the nature of the fluid. The only available needle for the purpose was an ordinary hypodermic syringe. I failed to get away any of the fluid and was naturally disappointed; but a few days afterwards the child was operated upon and relieved of a good quantity of purulent fluid from the chest. To use the same needle and syringe one time for exploration and another for hypodermic injection is an unjustifiable practice which I think cannot be too strongly condemned. It is unfair to one's patients to give them injections from a syringe which may have recently had foul pus in it, no matter how much one may have tried to clean it, and it is bad surgery to use the small needle.

In order to save carrying about more than one syringe I have adopted a plan which is at once simple and satisfactory. In my pocket hypodermic case I carry a large (exploring) needle which can be attached to the hypodermic syringe, but for purposes of exploration I intervene between needle and syringe a small piece of glass tubing, attached at either end by means of a little rubber tubing to the needle and syringe. The nature of the fluid can be seen when it reaches the glass tube, so none need reach the barrel of the syringe. The whole thing goes into my waistcoat pocket. If fluid is not found at the first puncture the needle point should not be wobbled about in the chest; the depth may be varied, as the pleura may be thickened, or the needle should be withdrawn and reinserted in another place.

The diagnosis of empyema being completed the question of surgical treatment should be at once considered. No good can possibly come of delay, and although we do occasionally meet with patients who have recovered after discharging an empyema through the lung they should be regarded as cases recovered in spite of neglect rather than indications favouring an expectant treatment of empyema. Delay also favours compression, perhaps hopeless collapse of lung, which, by reason of its structure and anatomical relations, is bound to give way and shrink before an increasing collection of pus. A neglected empyema, if it does not discharge through the lung and air passages, may point between the ribs or escape through or by the side of the diaphragm. The front of the chest at the fourth or fifth interspace is said to be the favourite place for an empyema to point. I have seen that part selected, but have also operated on one pointing just below the angle of the scapula. Various other situations are met with, and one case of an empyema discharging at the umbilicus is recorded.

The choice of operation for the relief of empyema lies among the following: (1) aspiration; (2) syphonage; (3) simple incision with insertion of a drainage-tube, and with or without counter incision; and (4) incision with resection of a portion of one or two ribs and drainage. I have had no experience of the first two methods—namely, aspiration and syphonage. I know they have many advocates, but I prefer treating a collection of pus in the pleural cavity on the same general principles that are applied to similar collections in other parts of the body—viz., giving free exit at once to the pus that is present and providing free drainage for what may follow.

A great deal has been said concerning the best place for making the incision; here, again, I prefer following the general surgical rule and make my incision in the most dependent position; and taking into consideration the somewhat barrel-shaped outline of the chest behind, and the fact that patients generally prefer to lie upon the back (not upon the affected side as much as is stated), I usually select the eighth or ninth interspace just outside the line of the angle of the scapula. Localised empyemata must of course be treated upon their own grounds.

Shall we or shall we not resect a portion of rib? is a question which has given rise to a great deal of controversy. I think the advantages gained by resection are quite sufficient to justify the proceeding. The chest cavity can be explored, masses of lymph removed, and better drainage secured. I have often seen great difficulty experienced with the drainage-tube after the operation of simple incision when the tube has been pushed out, as is so frequently the case, or has been withdrawn for cleansing or some other reason. The ribs which have fallen together after evacuation of the pus—or the valvular nature of the opening, or, perhaps, both—afford an obstacle to the reintroduction of the tube, which causes a great amount of unnecessary suffering to the patient and annoyance to the surgeon. This is easily avoided by removal of an inch of rib. One of the recent cases upon which I have operated with resection has helped to convince me of the superiority of this operation over that of simple incision. After removing some rib in the usual sub-periosteal method and then opening the pleura I introduced my finger and felt a quantity of loose semi-solid matter in the cavity; with a pair of forceps, guided by my finger in the chest, I removed quite a double handful of this coagulated lymph. I cannot help thinking that if I had simply incised and put in a tube I should have had considerable trouble by blocking of the tube, and that the patient would have made only a tedious recovery. As it was the temperature fell to normal the evening of operation and the patient was about with the wound healed early in the second week. I do not think much weight attaches to the objections raised against resection; the time need be very little prolonged beyond that occupied in simple incision, and the loss of an inch of rib will not be seriously felt. The increased risk of pyæmic infection through the cut ends of the rib is, I think, imaginary rather than real. Adhesions that may be felt in the chest should not be interfered with; their rupture might be attended by hæmorrhage and perhaps serious injury to lung substance, and their presence may help to prevent collapse of the lung. I am not in the habit of irrigating the cavity unless the pus is very flaky; no fluid should be forced into the chest. Counter-openings are not necessary, and loculated empyemata are better treated by separate incisions rather than by breaking down dividing partitions.

Hitherto I have used for drainage a rubber tube with a mackintosh guard. I now venture to introduce a new pattern which Messrs. Down Brothers have made for me from a model which I sent them. The tube is a metal one, it has a shield at its outer extremity and at its inner end there are a couple of retaining flanges which are to be opened out when the tube is *in situ*. This is done by simply turning the handles seen upon the face of the shield. These serve the double purpose of handles and indicators of the position of the flanges, as they point in the same direction, one flange and one handle being attached to the ends of a revolving rod or axle running the length of the tube. The flanges may be turned through one or two right angles, as may be desired. No harm can happen to the lung by opening and closing the flanges, as they easily revolve between the parallel visceral and parietal pleural surfaces, and the shield is protection against the tube being driven inwards. The invention will, I hope, prove a useful one. I am indebted to Messrs. Down Brothers for carefully carrying out my instructions and turning out a neat, well-finished instrument.

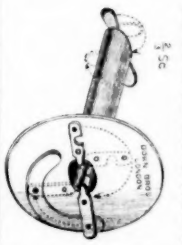


FIG. 1.—Self-retaining Empyema Tube (open).

Cardiff.

SUPERANNUATION GRANT.—Mr. Albert B. Day, M.R.C.S. Eng., has been awarded by the Brentford Board of Guardians a superannuation allowance of £128, based upon his salary, supplemented by an additional annuity of £22, on his resigning the medical officership to the Workhouse and Infirmary.

THE FLUID CONTAINED IN OVARIAN CYSTS AS A MEDIUM FOR THE CULTIVATION OF THE GONOCOCCUS AND OTHER MICRO-ORGANISMS.

BY FREDERICK J. McCANN, M.B., C.M. EDIN., M.R.C.P. LOND.,

PHYSICIAN TO OUT-PATIENTS AT THE SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.

TWO years ago it occurred to me that some use might be made of the fluid contained in ovarian cysts as a medium for the cultivation of micro-organisms. I was specially anxious to devise a ready method for the cultivation of the gonococcus, as the difficulty of growing this organism outside the human body has deterred the usefulness of Neisser's discovery as a clinical test. After repeated trials I succeeded in obtaining a medium of good transparency on which the gonococcus was successfully cultivated.

Method of obtaining the fluid.—It is necessary to obtain specimens of fluids which are fairly clear; at the same time contamination with blood should not prevent the fluid being used. Modern antiseptic precautions during abdominal operations render the collecting of the fluid less difficult. The trocar used to tap the cyst should be sterilised by boiling. The first portion of the ovarian fluid being rejected the remainder is collected in tall cylindrical glass jars, known to bacteriologists as "blood jars." These glass jars, which are provided with an accurately fitting glass stopper, are first cleansed with a 1 per cent. solution of mercuric chloride followed by absolute alcohol. The stopper should be smeared with vaseline containing corrosive sublimate to prevent it becoming fixed and to exclude atmospheric dust from the jar and its contents. The fluid collected in the jars should be allowed to stand for twenty-four hours in a cool place—e.g., an ice safe—when any sediment will have been deposited at the bottom. It will be well to boil a portion of the fluid in a test-tube in order to determine the proportion of albumin. If the fluid turns solid on boiling it will prove a good medium. As the proportion of albumin in cystic contents varies considerably it is specially needful to adopt this precaution.

Method of preparing the medium.—The fluid having been cooled as described the supernatant portion is removed by means of a sterilised pipette and transferred to sterilised test-tubes provided with a sterilised cotton-wool stopper. The test-tubes are then placed in a slanting position in an incubator, which should be kept at a temperature of from 66° to 68° C. for four hours. After four hours the fluid is of gelatinous consistence and good transparency. This method is preferable to that of running the temperature up gradually until solidification occurs, as the latter requires very careful watching and the risk of destroying the transparency of the medium is greater. If careful precautions be taken when the fluid is collected preliminary sterilisation will not be necessary. It is well, however, to test the sterility of the medium before use by keeping the tubes in an incubator at 36° C.

Method of cultivating the gonococcus.—It will be found that the gonococcus grows better when little mounds of pus are placed on the medium instead of streaks or punctures. The inoculated test-tubes should be placed in a glass vessel half filled with distilled water and provided with a well-fitting glass plate. The object of the distilled water is to moisten the air in the vessel so that the surface of the medium is kept in a similar condition. The glass vessel containing the test-tubes should be placed in an incubator kept at from 30° to 34° C. The cultures thus obtained, after twenty-four to forty-eight hours, are very thin, scarcely visible, greyish-yellow by reflected light, the surface smooth and moist, the edges diffusing into the surrounding medium which is not liquefied. Re-inoculations can be made and the cultures propagated through several generations. The essential difficulty in the cultivation of the gonococcus exists in the rapid overgrowth of this organism by other pus organisms. Should such an overgrowth occur the gonococcus may be separated by successive re-inoculations until a pure culture is obtained.

Microscopic examination of the culture.—For this purpose a portion of the culture is removed on the point of a sterilised platinum needle and transferred to the surface of a cover glass, another cover glass is superimposed, and the two rapidly separated. After drying the cover glasses may be stained with fuchsin as described in a paper by the author published in the West London Medical Journal.[1] Examination under the microscope shows that gonococci only are present, which can be verified by the use of Gram's method.[2]

The utility of this medium.—In addition plate cultures can be made. To economise the amount of fluid used a mixture with agar agar may be employed as with blood serum. Further experience will show whether the medium prepared as described will prove equally efficacious for the cultivation of other micro-organisms.

Curzon-street, Mayfair, W.

A CASE OF WART HORN OF THE LIP.

BY H. A. LEDIARD, M.D. EDIN., F.R.C.S. ENG.,

SURGEON TO THE CUMBERLAND INFIRMARY.

GROWTHS known as wart horns are rather matters of curiosity than of special pathological interest, as there is probably not much more to be said of their history or clinical features. The face and head are the commonest sites in which they are found, but I remember having seen one of small size on the shin of an elderly person, and when visiting Mr. Hutchinson's museum in 1894 I saw a recent specimen of an immense wart horn which had been removed from the leg. On referring to Dr. Crocker's Treatise on Diseases of the Skin under the heading of Cornu Cutaneum (p. 361) it is stated that the analysis of some collected cases shows that nearly half the horns occur on the hairy scalp, forehead, or temples, about one-fifth on the rest of the face and especially the nose. No mention is made of the origin of a horn from the lip, and the case I am recording may possibly be of some rarity and worthy of a brief notice. The photograph was taken by Dr. Eves, house surgeon, and from his notes I extracted the following particulars.

A platelayer aged sixty-nine years was admitted into the Cumberland Infirmary on July 24th, 1895. The patient, a

healthy old man, had had a growth on the lower lip for four years. It had caused no pain and commenced as a wart and grew gradually. At times pieces fell off, but there had never been any bleeding. Considerable annoyance, however, was created on account of the offensive smell given off. From the illustration the whole of the lower lip will be seen to be occupied by a large warty excrescence, which at one corner has developed into a large wart horn of considerable bulk. The lip was somewhat everted from the weight of the excrescence, and the origin appeared to be from the mucous surface. There was no naked-eye appearance of epithelioma,

[1] The Diagnosis of Gonorrhœal Inflammations, West London Medical Journal, April, 1896.

[2] Fortschritte der Medecin, 1884, No. 6.

but since, according to Lebert, epithelioma develops in 12 per cent. the lip was removed with a margin of sound skin around the growth and healed subsequently without trouble. There was no glandular affection and no sign or history of syphilis. I made no section of the lip, as it was preserved for museum purposes. Like most platelayers the patient smoked much.

Carlisle.

CASE OF SEVERE HEAT-STROKE; RECOVERY.

BY J. W. CRAWSHAW, M.B., CH.B. VICT.,
LATE SURGEON, OCEAN STEAM NAVIGATION COMPANY.

IN THE LANCET of April 4th Mr. P. J. Atkey reported a case of severe heat-stroke in which the temperature reached 108·2° F. and the patient recovered without any ill effects. In May, 1894, while acting as surgeon on board the Ocean Steam Navigation Company's s.s. *Pyrrhus* I had a somewhat similar case, which recovered very rapidly. The following account of the case is taken from my entries made at the time in the surgeon's log-book.

On May 28th, 1894, while in the Indian Ocean some 300 miles to the westward of Ceylon an English youth aged seventeen years was taken ill. He had been working nearly the whole day directly exposed to the heat of the sun. He never complained of any illness, but at 4.30 P.M. he was noticed to stagger and fall. Some of the men went to his assistance, found him very ill, and at once sent for me. I found him quite conscious, and he complained of violent headache and pains in the back and limbs. His skin was very hot and dry and his pulse was very rapid, full, and bounding. I placed my thermometer beneath his tongue, but by the time the temperature was taken he was quite comatose. The thermometer registered 108°. The method I adopted to reduce the temperature was very rough and simple, but proved very effective. I had the lad stripped as rapidly as possible and laid on the deck. A large piece of ice was placed to his head and sea water was brought in buckets and dashed over him in an almost continuous stream. After about twenty minutes of this treatment the temperature had fallen to 103° and the lad had recovered consciousness and expressed himself as feeling much better. The douching was discontinued, he was placed in his bunk and given hot tea to drink. A powder consisting of five grains of calomel and twenty grains of antipyrin was given. An hour later I found the patient's temperature had again risen to 105° and he was very drowsy. He became unconscious again and had a violent convulsion. The cold douching was recommenced in the same manner and continued for some time until the temperature fell to 100·4°. He again recovered consciousness and was placed under awnings on the hatch, where he was much cooler than in the forecastle. He felt much better and was able to partake of a little milk food. The temperature afterwards rose to 103°, but no higher. The skin continued hot and dry and a diaphoretic mixture was given. He passed rather a restless night, but on the next morning, the 29th, he felt fairly comfortable. His temperature was 101°. He had micturated very frequently during the night and the skin was still very dry. The bowels had not been moved, so two ounces of mistura sennæ composita were given. At 9 P.M. the temperature was normal. On the 30th he was much better. The temperature was normal the whole day and the skin moist. The bowels were well opened. On the 31st he felt quite well. He had no headache, dizziness, or other unpleasant symptom, and was allowed to resume his work. Throughout the remainder of the voyage he remained perfectly well, but was careful not to expose himself to the sun.

I can quite endorse all that Mr. Atkey says about the good chance these cases have on board ship. The surgeon cannot be far away and ice and water at a suitable temperature are plentiful. Much delay in a case like the above would greatly diminish the prospects of recovery. From the time when the patient was first noticed to be ill to the commencement of the douching ten minutes could not have elapsed, and it was undoubtedly this prompt treatment which saved his life. Dr. Wales of Canton was on board at the time and his experience of these cases was of great assistance to me.

Broadbottom, Cheshire.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF CHRONIC INVERSION OF THE UTERUS; CIRCUMSCRIBED SLOUGHING CAUSED BY AVELING'S REPOSITOR; SUBSEQUENT REDUCTION.

(Under the care of Dr. HERMAN.)

THERE appears to have been some uncertainty about the cause of the inversion in this case, and it is not possible now to say definitely what produced it. The treatment by Aveling's repositor was effectual as it has proved in so many cases recorded in our columns, but in this instance it produced a limited slough of the uterus. There are two important points to bear in mind when applying continuous elastic pressure for inversion: the pressure must act in the line of the axis of the inverted uterus and likewise of the axis of the pelvic brim and there must be effective counter pressure. Again, the pressure must be carefully regulated and the apparatus replaced in position as often as the restlessness of the patient makes it necessary. If these precautions are taken the inversion will usually be reduced in a few days, although in one recorded instance reduction was not effected for three weeks. For the notes of this case we are indebted to Dr. G. H. Cowen, resident accoucheur, and Mr. E. C. Davenport, clinical clerk.

The patient, aged thirty-one years, was admitted on Dec. 31st, 1895. She said that she had always enjoyed good health until her last confinement five months ago. On this occasion (the seventh) the child was a large one and was delivered by forceps. Mr. Alexander of Bromley, E., who attended her, stated that he noticed no inversion at the time, although he gave a uterine douche after delivery. He did not see her again until the day before her admission to the hospital. The patient said that she got up on the eighth day after delivery, and while the bowels were acting "the womb came down." She replaced it herself, but lost a good deal of blood. She had no further trouble for three weeks. Then the womb "came down" again. After this she had no inconvenience except a watery discharge until a fortnight before admission, when she had severe floodings. She went to a medical man who tried to get the womb back, but failing to do so advised her to go to the hospital. She had nursed her child until three weeks before admission. On vaginal examination there was found to be a round swelling about the size of a Tangerine orange projecting into the upper part of the vagina. It presented no opening. The sound could not be passed up by its side, nor could the body of the uterus be felt bimanually in its proper place. The urine was alkaline and ammoniacal, with a deposit of pus and phosphates. There was no other sign of disease. On Jan. 6th, 1896, Aveling's repositor was applied. Its pressure caused much pain and made the patient restless, for which reason, probably, it slipped off the fundus. Between the 6th and 20th it was frequently applied, but each time was found to soon slip off without reducing the inversion. On the latter date it was found that there was much greenish, offensive discharge, and on this account the repositor was discontinued and an antiseptic vaginal douche given every six hours. On Feb. 11th the discharge had almost ceased. On examination the inversion was found to be less complete than at first, and a loss of substance could be felt at one part of the fundus. The repositor was reapplied. On the 12th the fundus uteri was in the normal position and there was no discharge. On the 20th the patient was discharged well.

Remarks by Dr. HERMAN.—The uniform success of Aveling's repositor in the treatment of chronic inversion of the uterus makes it important both to strengthen the evidence that this treatment of the rare displacement in question is the right one, and to publish cases which aid sound judgment as to the

possible ill results of the use of the instrument. Here local sloughing resulted from its pressure; but when the pressure was discontinued and suitable treatment employed the slough was separated, the part brought into a healthy state, and then the instrument was reapplied with success. The cause of the inversion was in this case a mystery, as the patient had not been under medical observation during the time between her delivery and her admission to hospital. Communication with the medical man who attended the patient in labour seemed to make it certain that the inversion was not puerperal. There may have been a fibroid which dragged down the fundus and was spontaneously separated before the patient's admission. But as no fibroid was seen this is only a conjecture.

SHEFFIELD GENERAL INFIRMARY.

A CASE OF EXTENSIVE WOUND OF THE ABDOMEN.

(Under the care of Mr. ARCHIBALD CUFF.)

OF the many painful methods devised by man for self-destruction that of abdominal section is surely one of the most curious; and that it may not always prove an effectual means to an end the following case will show. In the instance of a stab wound of the abdomen a surgeon may have a little hesitation before he decides whether he will operate or not, but with a condition such as is described below there is no question as to the need of surgical interference. The indications are clear and cannot be mistaken. It is necessary to act in these as in all wounds: to arrest hæmorrhage, to cleanse the wound efficiently, &c. But beyond the immediate arrest of any hæmorrhage it may be possible to do little until the patient has somewhat recovered from his shock. This case well illustrates how the various difficulties may be successfully overcome. Extensive injuries such as this are not very common, but we may refer to others of comparatively recent occurrence which somewhat resemble it. Langenbuch[1] had a young man under his care who had been severely wounded in the abdomen by a waggon pole. The exposed intestines were much soiled and bruised; in some places the muscular and serous coats were lacerated. The intestines and peritoneum were carefully cleansed and the wound was closed, the patient making a good recovery. Stimson[2] treated a youth aged eighteen years who had been stabbed below and to the right of the umbilicus. There was a considerable quantity of blood in the peritoneum and three wounds of the intestine, two wounds of the omentum, and one of the mesentery. The patient recovered after operation and suture of the various wounds. Dr. Clark[3] has recorded a recovery after the removal of one-third of the omentum. The abdominal wound was five inches long, and the entire small intestine with some of the omentum and colon protruded. A quantity of shavings was found in the omentum. The patient was quite well three years after the operation. After a large wound such as that encountered in the present case, especially considering the direction of the incision, we must anticipate the eventual formation of an abdominal hernia; this does not, however, alter the fact that the man's life was saved by the skilled treatment of those under whose care he was in the infirmary. For the notes of the case we are indebted to Mr. Archibald Cuff, resident medical officer, under whose care, by the courtesy of Mr. G. H. Shaw, senior surgeon to the institution, the patient was.

A man thirty-three years of age, when attired only in his rather dirty shirt, drew a razor horizontally across his abdomen on the morning of March 15th. The resulting wound, commencing on the left as far out as and about one inch above the anterior iliac spine, and ending on the corresponding spine of the opposite side, completely severed all the abdominal muscles in its entire length, the peritoneum being cut through for the middle five and a half inches. This happened about 9.45 A.M. The man on being found unconscious was sent to the infirmary, arriving about 11 A.M., when the wound was found to gape widely, the recti muscles having retracted considerably; the intestines were almost wholly lying outside the body, in which condition they had been, at any rate, whilst the patient was in the cab which brought him. His condition at this time appeared to be desperate, the collapse being extreme: the breath was taken in sighing gasps at intervals, the pulse was imperceptible at the wrist, and the skin was cold and clammy to the touch. The intestines were protected with large marine sponges wrung out of a 1 in 2000 solution of mercury perchloride and efforts were made to revive the patient. A hypodermic injection of one-twentieth of a grain of strychnine was given, and as it was considered, from the quantity of blood clot lying upon the intestines and in the pelvis and from the general state of the patient, that the hæmorrhage had been severe, infusion of normal saline solution was thought to be indicated. This was quickly done by Mr. Rutherford, and about thirty-six ounces of fluid at a temperature of 108° F. were infused into the patient's system by way of the median basilic vein. The reaction to this treatment was prompt, the pulse becoming full and countable and the respiration, though shallow, more frequent and regular, and the patient showing by his movements that he did not quite appreciate the efforts that were being made. During this time the skin of the abdomen was disinfected to some slight degree by being scrubbed with a 5 per cent. solution of carbolic acid and the wound was surrounded with sterilised towels. The intestines, which up to this point had been protected with flat sponges, were now examined to ascertain if they had sustained any injury, but happily none was found; they and the pelvis, which contained a good deal of blood clot, were then cleansed and swabbed with the perchloride solution and the peritoneum dried as thoroughly as possible. At this stage the severed epigastric arteries began to bleed, and all four ends were secured and tied. The peritoneum was then brought into apposition with fine silk sutures, and after this the various layers of the abdominal wall were brought together with the same material. The greatest difficulty in this part of the proceedings was associated with the endeavour to bring the ends of the recti and their sheaths into apposition, the strain upon the sutures being very great. Finally, silkworm gut was used for the cutaneous sutures. After plentifully sprinkling the wound and its neighbourhood with iodoform the usual dressings were applied. The iodoform was not used from any idea of its antiseptic properties, about which some people are now rather sceptical, but on account of its very useful property as a powder of absorbing discharge and so leaving an arid and inhospitable dwelling-place for any cocci which might come out of the neighbouring hair follicles unscathed when the storm of antiseptics should have passed over. The hopes in this direction were quite fulfilled, for the gut stitches were removed on the tenth day, the skin wound having healed by first intention, and with the exception of a small abscess in connexion with one of the deep stitches in the angle of the wound which developed later all continued to progress favourably. The patient's after-history is briefly as follows. On his removal from the table collapse, though to a lesser degree, was again apparent and was met by a rectal injection of a pint of hot coffee, by the administration of more strychnine, and by brandy given by the mouth. He quickly rallied and the pulse-rate and temperature, which were then 140 and 97°, became more favourable, and at 6 P.M. were 118 and 102° respectively. The patient perspired profusely. From this time he never retrogressed, the temperature falling and remaining at a fairly normal level for the next ten days, when it rose to 100·8° on the occurrence of the small abscess and then gradually fell again. As regards treatment, the bowels were kept open with copious enemata given on the first, second, and fourth days. This was regarded as being very important in order not to allow any stagnating fæces to remain in contact with walls whose peritoneum might be weak in protective properties. Up to late on the first evening only warm water and a little brandy were allowed to be given. After this, milk well diluted, meat juice, ice, brandy, and barley water were frequently given in small quantities. Milk appeared to produce vomiting, and malted milk was substituted with advantage for a few days. This restricted diet at the end of a week was gradually replaced by an ordinary one. The patient was allowed to sit up in bed on the sixteenth day and was up and dressed on the twenty-eighth day.

Remarks by Mr. CUFF.—The case, I venture to think, is interesting on account of its initial severity, for the man, after inflicting a severe wound, was more than an hour without treatment, was brought to the infirmary in a jolting cab, and appeared to be *in extremis* on his arrival. The

[1] Annual of the Universal Medical Sciences, 1894, vol. iii., C 47.
[2] Annals of Surgery, Philadelphia, 1894.
[3] Transactions of the Texas Medical Association, May, 1893. Annual of the Universal Medical Sciences, 1895, vol. iii., C 44.

peritoneum seems to have been a patient and long-suffering membrane not to have taken exception to all this rough treatment, for at no time was there the slightest evidence of peritonitis. Another point of interest was the success of the two methods of filling and stimulating the vascular system—i.e., by venous infusion and by rectal injection. The effect of both was very marked, and in the case of the first almost immediate, in the second appearing in about ten minutes. I would call attention to what has been insisted upon by Dawburn, McBurney, and others—namely, the importance of having the normal saline solution really hot, as hot as the hand can comfortably bear. The stimulating effect of infusion is then much greater and more lasting than that produced by solutions at 100°, the temperature generally advised.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Use of Guaiacum in the Treatment of Chronic Gouty Affections and its Value in Warding off Acute Attacks.

AN ordinary meeting of this society was held on May 26th, Dr. W. HOWSHIP DICKINSON, President, being in the chair.

Sir ALFRED B. GARROD read a paper on the Use of Guaiacum in the Treatment of Chronic Gouty Affections and its Value in Warding off Acute Attacks. He first alluded to a communication to the Royal Medical and Chirurgical Society on Feb. 8th, 1848, entitled "Observations on the Pathological Condition of the Blood and Urine in Gout, Rheumatism, and Bright's Disease," in which he had the privilege of demonstrating the presence of uric acid in the blood and also the relation between uric acid and gout, and many other points; these were referred to as they bore upon the present paper, the chief object of which was to direct the attention of the society to the value of guaiacum in the treatment and prevention of gout. The name guaiacum was given to the resin of a tree called *Guaiacum officinale*, the wood of which was termed lignum vitæ. After speaking of numerous observations carried on for very many years among both hospital and private patients with guaiacum, both in the form of a powder and as ammoniated tincture of guaiacum, Sir A. B. Garrod thought that he had been successful in establishing the following points in regard to the action of guaiacum: 1. Guaiacum was innocuous, and might be taken for an indefinite period of time, and, looked upon as a condiment rather than as a drug, as harmless as ginger or any other condiment. 2. Guaiacum possessed a considerable power, but less than colchicum, in directly relieving patients suffering from gouty inflammation of any part; it might be given whenever there was but little fever. 3. Guaiacum taken in the intervals of gouty attacks had a considerable power of averting their recurrence; in fact, it was a very powerful prophylactic. 4. Guaiacum did not appear to lose its prophylactic power by long-continued use. 5. There were a few persons who could not readily continue the use of guaiacum; for such cases there were other drugs whose action was in some respects similar as prophylactics—perhaps serpentary was one of the most powerful of these. Sir A. B. Garrod gave a short account of serpentary, and mentioned the fact that he had given it successfully in gouty inflammation in the elderly subject; as a prophylactic he had less personal experience, but he doubted not that it was possessed of considerable power. Before attempting to explain the mode of action of guaiacum in the treatment of gout, he gave his view of the origin of uric acid in the animal economy; instead of supposing that it was formed in the system by the metabolism of the nitrogenised tissues, and then thrown out by the kidneys, he was of opinion that it was produced from urea and other nitrogenised bodies in the blood by the direct action of the kidney, and that when uric acid was contained in the blood this arose from the absorption from the kidney structures of the urate of ammonium, depending on the want of sufficient throwing-off powers from these tissues. He was aware that it was from his own discovery of uric acid in the blood that the opposite view of the formation of uric acid arose. To explain the prophylactic action of guaiacum he did not think that it affected the formation of uric acid, but that it acted directly on the kidney itself as a stimulant and enabled it to get rid of any accumulation in the tubules and thus prevented absorption from them into the blood. In confirmation of this view it was found that patients when taking guaiacum often had unusual deposits of urates in their urine. The paper closed with the following remarks: "If the statements contained in this communication had the effect of inducing his medical brethren to direct their attention to the value of guaiacum in the treatment and prevention of gout he felt he should have conferred some benefit on the profession and through them on the public at large."

Dr. NORMAN MOORE said that Sir A. B. Garrod was the first to lay down the definite knowledge which enabled physicians to say for certain post mortem that a given patient had or had not suffered from gout. At St. Bartholomew's Hospital a very large number of cases of gout were met with, possibly because they were close to the Central Meat Market. He had seen at least 100 instances post mortem of persons displaying the features in morbid anatomy which Sir A. B. Garrod had shown to belong to this disease. Colchicum might be given for long periods with advantage and some success in warding off the attacks. Though some of the success might be due to care in diet he did not think it was entirely due to this, because persons who suffered from the most inveterate gout passed through fewer attacks when taking small doses of colchicine over long periods. He asked Sir A. B. Garrod what was the true history of the reputation of guaiacum in former times. At the earlier part of the seventeenth century guaiacum was extolled as the most successful remedy for what we should call tertiary syphilis. He wondered if its reputation was due in part to its effect on sore-throat or perhaps part of the pain that the patients suffered was gouty. Indeed, it was possible that guaiacum was successful in postponing or altogether preventing further attacks of pain which were not really syphilitic, but gouty.

Dr. CALDWELL (New York) held that "poor man's gout" required a different treatment from "rich man's gout," the former requiring stimulants, and he advocated "sweating it out." He asked Sir A. B. Garrod if it were not possible to secure the elimination of the *materies morbi* at the site of its deposit.

Dr. MURRELL said that he could support Sir A. B. Garrod's conclusions as to the efficacy of guaiacum in chronic gout. He had used guaiacum during the last six years at the Westminster Hospital, not only for chronic gout, but for rheumatism, tonsillitis, and chronic bronchitis associated with the gouty taint. The Throat Hospital lozenges he had found useless, because the dose was too small and lozenges were too expensive for out-patients. The taste of the mixture of the British Pharmacopœia was so atrociously nasty that patients declined to take it. The tincture was difficult to dispense because it did not mix with water, and so he made a confection containing ten grains in a drachm of honey, the patient taking one or two drachms three times daily immediately after meals. Though this was efficacious, yet it presented disadvantages, for it acted as a powerful purgative and brought out a rash like that of a copaiba, but not attacking the face; it was accompanied with much itching. The drug sometimes caused burning feelings in the throat with a sensation of constriction, but this was overcome by giving the resin with half an ounce of extract of malt. He had also given it mixed with an equal amount of confection of sulphur. Though he had come to the same conclusion as Sir A. B. Garrod he felt he had been working on different lines, for he had made use of guaiacum resin; he had given it alone instead of in combination with cinchona, iodide of potassium, or colchicum; he had given it also in much larger doses—namely, twenty grains of the resin three times a day, the resin being of about four times the strength of guaiacum itself. He had not given guaiacum in cases of acute gout, but he had given colchicum wine with iodide of potassium three times daily. Recently he had used a liniment consisting of half an ounce each of iodide of potassium, methylated spirit and soap liniment, with oil of cajuput and oil of cloves. A piece of lint steeped in this liniment was applied to the affected joint with good results. He had no doubt as to the efficacy of guaiacum in warding off attacks.

Dr. HAIG said that while he agreed that guaiacum tended to ward off gouty manifestations he did not concur as to the way in which the drug acted. Iodide of potassium provoked diuresis and dilatation of all the bloodvessels with a fall of blood pressure. Lithia and ammonia

had a similar action, as also had copaiba, tar, cannabis indica, certain salts of calcium, and certain bitters, such as chiretta, gentian, and possibly serpentary. Copaiba contained a large quantity of acid and guaiacum agreed with it in this. He believed that all these drugs diminished the excretion of uric acid and kept the blood clear of it, and he had explained fully elsewhere the method of action of some of those drugs. He was interested in what had been said about the effects noted by Cullen and other physicians of his time because it agreed with his view that these drugs suppressed gout, but did not cure it. He accepted the view that urate of ammonia was not formed from urea in the kidneys, but that the reverse took place. Much of the uric acid met with in disease was not formed in the system, but was introduced with animal food.

Dr. EWART said that he had been in the habit of giving guaiacum in conditions akin to gout, and he had been struck by the effect which it exerted upon the condition of the patient. He thought that the action of guaiacum upon the capillaries was not limited to the kidney, but extended to the whole system and in particular to the capillaries of the muscles; indeed, the effect of guaiacum in relieving painful manifestations located in the muscles was well known. Taking into consideration the bulk of the muscular system it was easy to imagine that any interference, however small, with its metabolism must have an appreciable effect upon the juices, and as to the glandular system guaiacum acted in that direction also, and was a recognised hepatic stimulant. If the drug were used over a long period in doses sufficient to cause a laxative action this would influence the health of gouty persons very materially. He had found tincture of iodine very useful in combination with guaiacum.

The PRESIDENT said that the treatment of rheumatism by guaiacum was a very old practice; it had been used at St. George's Hospital for at least a century, and the method was certainly much more successful than others in use at the early part of this time. The treatment of acute rheumatism by guaiacum had been continued until the last twenty years, and even now it was used for chronic rheumatism. From his own experience he could speak very strongly as to its value in some forms of acute rheumatism as well as in gout. With regard to the relation of uric acid to gout he placed himself in the position of a disbeliever. There was no doubt of its presence, but he preserved doubts as to its being the real cause; was it not what we might call a by-product? During convalescence from scarlet fever when nephritis was present it was not uncommon to find enormous quantities of uric acid passed, but that did not necessarily lead to gout.

Sir A. B. GARROD, in reply, said that with regard to the absolute and necessary connexion between gout and uric acid one never missed finding urate of soda deposited in the tissues after even the slightest attack of gouty inflammation. He admitted the value of guaiacum in acute rheumatism, but many cases formerly treated as acute rheumatism were really instances of acute gout. Though many pains formerly treated as syphilitic were possibly gouty, yet he was convinced also that guaiacum would relieve muscular pains which were not gouty. Though he had frequently prescribed this or that drug in combination with guaiacum he did not commonly give many together. As healthy normal skin could not secrete uric acid, he could not advocate "sweating the disease out." He was convinced that there could be no gouty symptom without the presence of urate of sodium in the blood and this had no relation to the amount thrown out by the kidneys. Guaiacum might act by increasing the amount excreted, causing visible deposit in the urine, to which the patient would call attention.

CLINICAL SOCIETY OF LONDON.

Typhoid Fever with Hyperpyrexia and Cardiac Dilatation.—Chronic Dilatation of the Colon.—Central Sarcoma of the Femur with Early Dissemination.

THE annual general meeting of this society was held on May 22nd, Dr. BUZZARD, President, being in the chair.

Dr. A. H. W. CLEMOW related a case of Typhoid Fever associated with Hyperpyrexia and Acute Cardiac Dilatation in which venesection was performed. The patient, a man aged twenty-five, became ill on Nov. 13th, 1895, and when first seen on the 18th his temperature was 104° F. (although he had been taking antipyretics for two days or more), and fine crepitations were audible at the base of the right lung. On the 19th epistaxis occurred and the following day after a dose of calomel (3 gr.) typhoid stools were passed. He was placed upon an appropriate dietary of milk (two and a half pints per diem) and beef-tea (one and a half pints) and brandy, and ordered cold or tepid sponging at frequent intervals, as the temperature might indicate. During the next four days the temperature ranged between 102° and 104°. Retention of urine occurred during the night of the 25th, and was relieved by a gum elastic catheter on the morning of the 26th, and again at 9 P.M. His condition at the time was otherwise satisfactory; the pulse was 90, the tongue was moist and not excessively furred, and there was no abdominal distension. At 10 P.M. and 11.45 P.M. epistaxis recurred. The temperature at midnight was 103·4°. Two hours later there was a severe rigor, the patient became wildly delirious, and the axillary temperature rose to 106·7°. Vigorous iced sponging reduced this to 103°, and he became quiet, though he continued unconscious. At 7 A.M. his temperature was normal, but at 7.30 there was another rigor with delirium, and the axillary temperature rose to 107°. Iced sponging again lowered the temperature and quieted the delirium. At 9.30 A.M. he was seen in consultation by Sir William Broadbent, who advised the subcutaneous injection of one-third of a grain of morphia. Between 11 and 11.30 A.M. a rapid change for the worse occurred and Dr. Clemow was requested by the nurse to come at once as the patient was sinking rapidly. On his arrival the patient was found to be apparently in "articulo mortis"—the face was deeply cyanosed, the jaw had dropped, conjunctival reflex was absent, and respiration consisted of almost futile inspiratory efforts. Examination of the heart revealed a very considerable distension of the right side of acute onset. Venesection from the left median basilic vein was at once resorted to, eight ounces of blood being removed, and subcutaneous injections of digitalin (gr. $\frac{1}{100}$) and strychnia (gr. $\frac{1}{30}$) and brandy administered. The cyanosis then gradually diminished, the pulse, although very feeble and irregular for a few minutes, became fuller and less rapid, and shortly the respiratory movements improved, air entering the chest more readily. An hour later, and subsequently every three hours for the next twenty-four hours, the injection of digitalin and strychnia were repeated, and were supplemented by enemata of peptonised milk, beef-tea, and brandy. About five o'clock the patient regained consciousness and was able to take some nourishment. The next day considerable hypostatic congestion of the lungs manifested itself, but passed off under appropriate treatment. During the remainder of his illness rigors threatened on two or three occasions, the temperature rising to 103° or 104°, but the patient ultimately made a complete and perfect recovery.—Dr. CHAPMAN remarked that it was worthy of note that not only was venesection successful in reducing the temperature, but that antipyretic remedies had failed to do so.—Dr. F. L. BENHAM said it was doubtful to what degree the venesection had benefited the hyperpyrexia *per se*, or how much the improvement was due to relief given to the pulmonary complication by blood-letting. In one case of rheumatic hyperpyrexia, which after the third day from admission could not be controlled by ordinary antipyretic means such as cold, he employed venesection as a last resource, but with no improvement. The rigors might have indicated advancing pulmonary inflammation.—Dr. SAMUEL WEST remarked that rigors frequently followed hyperpyrexia. The bleeding was a great relief to the over-distended right ventricle and it acted in a mechanical way; the amount of blood let should depend upon the bulk of the patient. It would certainly not, as a rule, reduce pyrexia. There were comparatively few cases in which bleeding was admissible, but in these it was often not performed when it ought to be.—Dr. CLEMOW, in reply, said that he gave the patient no antipyretic remedies beyond cold sponging, which never failed to keep the temperature down. The rigors he regarded as due to the severity of the enteric fever. The venesection was done solely to relieve the over-distension of the right heart. He mentioned the case of a woman who was suffering from uræmia within a few hours of her delivery. She had marked orthopnœa and was very deeply cyanosed. Venesection to the amount of twelve ounces was practised and was followed by rapid and complete relief, delivery being afterwards effected, and the patient recovered.

Dr. ROLLESTON and Mr. HAWARD brought forward a case of Chronic Dilatation of the Colon. A boy aged twelve years had been subject to constipation since six months of age. He

came from Inverness, and porridge had formed a considerable part of his diet. From time to time he had attacks of vomiting and complete inactivity of the bowels, on one occasion having gone for nine weeks without an evacuation. On admission to St. George's Hospital he was seen to be emaciated, the eyes sunken, and the complexion of a bistre tint. The abdomen was enormously distended, and through the stretched abdominal wall peristaltic contractions of the intestine could be seen. The front and upper part of the abdomen were resonant and no fæcal masses could be felt. Palpation of the abdomen usually gave no pain, but sometimes, on deep pressure, he complained of tenderness, the situation of which varied. The rectum was natural and there was no spasm of the sphincter. During the three months that he was under observation his condition varied, often very suddenly. He would improve for a time, the bowels acting daily and the abdomen becoming soft. Then suddenly constipation and vomiting would come on without manifest cause. These attacks usually subsided in a day or two, but in one of them he died. There was never any obstruction, the bowels acted nearly every day. The treatment was varied, but, with the exception of calomel, nothing seemed to do any material good. At the necropsy great dilation of the colon was found; the ascending colon passed up to the hepatic flexum, from which point the transverse colon descended to the neighbourhood of the cæcum; the descending colon occupied the greater part of the right half and upper portion of the abdomen; it passed out of sight in the left lumbar region, and then joined the dilated sigmoid flexure. No stricture or cause for obstruction could be found anywhere. There were numerous ulcers in the colon, due, presumbly, to distension; the muscular coats were hypertrophied. Cases of dilatation of the colon were divided into acquired and congenital, and reference was made to nine cases, eight of which were fatal. The etiology and pathology of the condition were discussed, and it was shown that neither mechanical causes nor an inflammatory origin were borne out by facts. The high mortality and the unsuccessful results of treatment were pointed out and the danger of massage insisted upon. The question of colotomy or of opening the small intestine was considered, and it was advised that, having regard to the abnormal mobility and change in the position of the bowel, any operation should include as its first step the ascertainment of the anatomical relations of the parts involved.—Dr. HALE WHITE said that he agreed in the correctness of the classification. The acquired form, due to constipation, was common, and as it was well recognised it was not of much importance. Of the congenital form several cases were found scattered through medical literature. For these there was no satisfactory explanation whatever, the constipation being a result rather than a cause. Some of the cases of dilatation of the colon, particularly of the sigmoid, occurred in adults and were not associated with sufficient constipation to account for the dilatation. These cases appeared to him to be comparable to cases of paralytic distension of the stomach; they were equally common in men and women. Treatment by opening the large bowel above the distended part had been practised, so as to allow the faces to pass, the portion of bowel below being regularly washed out and left to rest.—Mr. BRUCE CLARKE said that besides the case recorded by Dr. Herringham and himself he could mention another instance which he believed to be in the same category. It was that of a man who had obstruction of the large intestine which was thought to be carcinomatous. Colotomy was performed and the patient improved and lived for four years, dying ultimately of a condition unconnected with the bowel.—Dr. ROLLESTON, in reply, said that the case recorded by Osler was the only one which had not proved fatal. As in these cases the colon was so movable it was suggested that exploratory laparotomy should be first done, as otherwise when lumbar colotomy was performed the surgeon might fail to find the bowel.

Mr. G. R. BALDWIN read the notes of a case of Central Sarcoma of the Femur with Early Dissemination. The patient, a man aged thirty-five, was admitted into St. George's Hospital on Sept. 3rd, 1895, with a central sarcoma of the femur. The thigh was amputated and the man discharged on Oct. 2nd. Soon after leaving the hospital he suffered from pain in the right arm, which subsequently became stiff and weak. On Nov. 1st he found on waking that he was paralysed over the lower part of the trunk and lower limbs. He was re-admitted on Nov. 8th, the trunk, the left lower limb, and stump being paralysed and devoid of sensation. He was suffering from incontinence of urine and fæces. The right arm was completely paralysed and the left partially; both upper extremities were without sensation save over the deltoid muscles. He died two days after admission. A post-mortem examination was made and widely disseminated growths were found. Of these the largest was one growing from the seventh cervical vertebra and extending upwards and downwards in front of the lower cervical and upper dorsal vertebræ, the lower cervical nerves being embedded in its substance. Other growths were present in both lungs and in the right kidney. Both primary and secondary growths were mixed-celled in nature. Mr. Baldwin also referred to a second case in which a central sarcoma of the femur became disseminated. Unfortunately, there was no record of the nature of the growth and no post-mortem examination was made.

The business of the annual general meeting was then proceeded with. A satisfactory report from the council was read. The membership now numbered 568. A committee of the society had been appointed to make an index to all the volumes of Transactions which had been issued by the society, of which Dr. A. E. Garrod was secretary.

The committee appointed to investigate the clinical value of the antitoxin of diphtheria hoped to be able to present their report during the coming year, and they added that they felt that the necessity for the present inquiry had not been affected by the publication of reports on the use of antitoxin either in this country or abroad. The financial statement showed a comfortable balance on the right side.

The customary votes of thanks to the retiring officers having been giving, the result of the ballot for the election of officers and council for the year 1896–97 was declared as follows:—President: Thomas Buzzard, M.D. Vice-Presidents: Thomas Barlow, M.D., Frederick Taylor, M.D., Thomas T. Whipham, M.D., William Henry Bennett, F.R.C.S., Rickman John Godlee, M.S., and William J. Walsham, F.R.C.S. Treasurer: William Miller Ord, M.D. Council: W. H. Allchin, M.D., W. P. Herringham, M.D., Constantine Holman, M.D., Patrick Manson, M.D., Sidney Martin, M.D., F. W. Mott, M.D., F. G. Penrose, M.D., Seymour J. Sharkey, M.D., E. Markham Skerritt, M.D., W. Hale White, M.D., Dawson Williams, M.D., W. Bruce Clarke, M.B., A. Pearce Gould, M.S., C. R. B. Keetley, F.R.C.S., C. B. Lockwood, F.R.C.S., Rushton Parker, B.S., Bilton Pollard, F.R.C.S., A. Q. Silcock, F.R.C.S., M.S., W. G. Spencer, M.S., and J. Bland Sutton, F.R.C.S. Honorary Secretaries: G. H. Makins, F.R.C.S., and J. Kingston Fowler, M.D. Trustees: Christopher Heath, F.R.C.S., William Miller Ord, M.D., and J. Burdon Sanderson, M.D.

BRITISH GYNÆCOLOGICAL SOCIETY.

Exhibition of Specimens.—The Treatment of Carcinoma and other Diseases by Animal Extracts.

A MEETING of this society was held on May 14th, Dr. C. H. F. ROUTH, Vice-President, being in the chair.

Dr. F. F. SCHACHT showed a specimen of Unruptured Tubal Gestation containing a Fœtus of about six weeks' development.—Dr. HEYWOOD SMITH and Dr. J. A. MANSELL MOULLIN made some observations, and the specimen was referred to a sub-committee to be reported upon.

Mr. F. BOWREMAN JESSETT showed a specimen of Multilocular Cyst of the Omentum. It was uncertain whether the cyst was originally omental or whether it was a vagrant ovarian cyst which had formed a secondary attachment to the omentum. The specimen was referred to a sub-committee.

Dr. ROBERT BELL (Glasgow) read a paper upon the Treatment of Carcinoma of the Uterus, Certain Forms of Ovarian Disease, and Fibroids of the Uterus by means of Thyroid, Parotid, and Mammary Gland Therapeutics. Judging from the beneficial effects which thyroid extract exerts upon the epithelium of the skin in psoriasis, Dr. Bell was led to infer that epithelioma of the cervix uteri might be due to the absence of some obscure catalytic action of this gland, and that thyroid extract might consequently be useful in the treatment of epithelioma of the cervix and of other unhealthy conditions of mucous surfaces. In his experience metrorrhagia was frequently associated with unhealthy conditions of the thyroid gland. He regarded lesions of the

cervix uteri, such as lacerations and hypertrophy due to endometritis, as the predisposing cause of malignant disease, and from his experiments he concluded that the exciting cause existed in an abnormal condition of the thyroid gland. It would further appear that the parotid gland exerted a powerful influence upon the ovaries; and though not able to judge whether ovarian disease was super-induced by any lack of influence of the parotid he was able to vouch for the fact that ovarian disease could be brought under subjection by the administration of parotid glands of healthy young sheep, calves, and pigs. Again, he regarded it as beyond dispute that fibroids of the uterus, as well as hyperplasia and flaccidity of the organ, could be beneficially affected by the employment of mammary glands of healthy animals. He had also ascertained that ovarian disease was beneficially influenced by the administration of mammary gland. He then gave the history of three cases of epithelioma of the cervix treated by thyroid extract, two cases of uterine fibroids and two of menorrhagia treated by mammary palatinoids, and four cases of ovarian disease treated by parotid palatinoids, all treated within the last six months, except the first case of epithelioma, which dated from last summer.—Mr. BOWREMAN JESSETT thought the comparison of epithelioma with psoriasis and myxœdema had no rational basis. He noted that in all the cases of epithelioma curetting was done, followed by the application of such strong caustics as chromic acid and chloride of zinc, and he was inclined to attribute the improvement to the use of the caustic. The results would be more convincing if no local measures had been adopted. As regards fibroids, it was well known that they were apt to get smaller under the influence of rest and the menopause. Dr. Bell's cases were too recent for the deductions to be regarded as conclusive. The cases of ovarian disease were also treated locally by means of iodised phenol and ichthyol tampons, and these means alone were generally found sufficient. No doubt, however, many would give these new methods a trial.—Dr. LEITH NAPIER said he had no experience of this treatment, but he had recently read a paper by a Dr. Jouin who, in one case, was treating a patient for obesity by means of thyroid extract. She happened to have a fibroid, and at the end of twelve months he discovered that it had shrunk from two inches above the umbilicus to one inch above the pubes. This led him to try it in other cases. The second, a soft fibroid, was benefited; the third, a hard fibroid, was not. Three other cases were too recent to draw conclusions from. The recent views of the pathology of soft fibroids regarded them as associated with morbid glandular action, so it was quite possible that thyroid extract might exert an influence over them.—Dr. HEYWOOD SMITH observed that Dr. Bell did not tell them what was the condition of the cervix in the first case at the time of the last examination, but in all cases there seemed to have been an amelioration of symptoms in a much shorter time than they were accustomed to. It would be useful to know whether any of the cases were treated by animal extracts alone and what led Dr. Bell to decide which extract to employ in any given case. In view of the results recorded in the paper he thought they should give the method a trial.—After some remarks by the CHAIRMAN and by Dr. MACAN, Dr. BELL replied. He thought Mr. Jessett was under a misapprehension in thinking that he compared epithelioma to psoriasis. It was rather that in view of the action of the thyroid extract on the epithelium in psoriasis he thought it might also have a good effect in epithelioma. He used mammary extract for fibroids because the mamma and uterus were in close physiological sympathy; whilst the physiological relation between the parotid gland and the ovaries, as shown by the frequent metastases between the two, led him to give parotid extract in ovarian disease. He felt sure that those who tried the method would be satisfied with the results.

PATHOLOGICAL SOCIETY OF MANCHESTER.

Exhibition of Specimens.—Arseniuretted Hydrogen Poisoning.

A MEETING of this society was held on May 13th, Dr. H. R. HUTTON, President, being in the chair.

Dr. PETER THOMPSON showed specimens of Hydatid Cysts affecting the liver and transverse mesocolon. The liver was the seat of extensive growths, there being five distinct tumours in various stages of activity. Two had suppurated, two had died and had been converted into inert masses, whilst the fifth cyst was in the active growing stage. The tumour found in the transverse mesocolon was about the size of a small orange. It was easily felt through the abdominal walls and was freely movable to all parts of the abdominal cavity. It was quite hard and solid and on section the interior showed a large number of opaque membranes, the walls of shrunken daughter cysts with putty-like material between them. It was a typical example of a dead hydatid cyst which had been converted into an atheromatous mass. Hooklets were found in all the tumours.

Dr. ARNOLD W. W. LEA showed an Anencephalic Fœtus in which the whole of the medullary canal had remained open. The fœtus was a female weighing 2 lb. 12 oz., stillborn. The limbs and muscles were well developed. The face looked almost directly upwards, the neck being extremely short, as is usual in these cases. The vault of the skull was absent. The base was prominent and covered by a fine membrane adherent to it and continuous with the skin at the sides of the head. This membrane was also continued along the spinal column as far as the sacrum, and formed a band two and a half inches wide, extending from the angles of the ribs on each side. It was united laterally to the skin of the back. The vault of the skull ceased at the supra-orbital ridge; posterior to this, and attached to the base of the skull, were two solid masses apparently representing the cerebral hemispheres. On reflecting this membrane numerous nerves, cranial and spinal, were seen to pass from its under surface towards the foramina. The eyes and external ears were well formed. The base of the skull was very convex, and showed at each side of the basi-sphenoid a bony plate representing the wings of the sphenoid or the ex-occipitals. There were numerous foramina in the base of the skull. The laminæ and spinous processes of all the vertebræ were absent and no trace of the spinal cord could be detected. All the other organs of the fœtus were normal and well developed. This condition of the nerve centres appears to be the result of intra-uterine hydrocephalus occurring before the fourth week. As a consequence of this the ventricles and the central canal of the spinal cord become much dilated and ruptured, the fluid escaping. The cranial and spinal nerves are, however, developed from the nervous tissue remaining on the ventral aspect. The membrane then in these cases would consist of the pia mater and arachnoid, containing also a small amount of nervous tissue, and from this the nerves are developed. Cases of anencephalus are not very uncommon. It is, however, very rare to find the whole of the spinal canal remaining open, with consequent non-development of the laminæ and spinous processes of the vertebræ.—Dr. ARNOLD LEA also showed a Fœtus with Solitary Cystic Kidney, absence of Ureters, Imperforate Anus, Double Talipes Equino Varus, and Genu Recurvatum on the Right Side. The fœtus was a male, stillborn, weighing 3 lb. 12 oz. On dissection the heart and lungs were found to be normal. On opening the abdomen the most striking object was a large cystic organ occupying the right lumbar region and extending into the cavity of the pelvis, which it filled up on the right side. In position this structure corresponded to a kidney. There was, however, no ureter. On section numerous cysts, some very large, were seen scattered through it. There was no renal pelvis. Microscopically the solid part of the mass was mainly composed of fibrous tissue, with very numerous and large vessels and capillaries. The cysts were lined by cubical epithelium, the nuclei staining well and the cell substance being granular. Each cyst was surrounded by a capsule of fibrous tissue containing numerous round cells, some of which were pigmented. Hæmorrhage had occurred into some of the cysts. There were also groups of epithelial cells scattered through the structure, some of which resembled renal tubules. No glomeruli were observed. On the left side there was total absence of kidney and ureter. The urachus was wide, the bladder very small and empty, and the urethra patent. The suprarenals were large and well formed. The liver and spleen were normal. The stomach, small intestine, and greater part of the large intestine were normal. The sigmoid flexure passed down on the right side of the pelvis and ended by fusing with the base of the bladder, into which the end of the gut opened by a valvular opening admitting a probe. There was no anal depression. The vasa deferentia and testes were well developed, the latter being undescended. The origin of the cystic kidney of infants has been ascribed to intra-uterine inflammation occluding the papillæ. In this case, however, it appeared to be due to a developmental condition. The ureter and renal pelvis, which normally arise as

a protrusion from the lower end of the Woolfian duct, had failed to develop. The organ described above represents an embryonic kidney, development having been arrested at an early period. On the left side the portion of the Woolfian body which should develop into the kidney had entirely disappeared. The connexion of the allantois with the hind gut had remained patent and there had been no involution of the epiblast to form the anal end of the gut.

Dr. HUTTON showed the heart of a dog (an English setter ten years old) from the wall of the right ventricle of which a fibro-cystic tumour, an inch in diameter, grew. The wall of the right ventricle was thickened and the cavity dilated. The animal had been thin and feeble for about a year and had had three attacks of syncope in the last month and died in the third attack.

Dr. DIXON MANN and Dr. J. GRAY CLEGG described the post-mortem appearances of Two Cases of Poisoning by Arseniuretted Hydrogen and showed specimens. There were five cases in all, three terminating favourably. They occurred in a manufactory where for trade purposes it was necessary to dissolve a considerable quantity of zinc in hydrochloric acid. The hydrochloric acid used at the time of the poisoning was found afterwards to contain an excessive amount of arsenic as impurity to the extent of 0·309 per cent. of metallic arsenic. The zinc also contained arsenic in small amount. The symptoms were, briefly, pain in the back, vomiting, melæna, hæmoglobinuria, and jaundice. The post-mortem appearances were as follows: a broad, dark-blue line on the gums, ante-mortem clots in the heart and great vessels, œdema and congestion of the lungs, general bluish tinge of the omentum, hyperæmia of, and petechiæ in, the mucous membrane of the stomach and intestines, congestion of the spleen, slight enlargement of the liver, great swelling, and congestion of the kidneys. On section the substance was found to be dark-red and the pyramids showed blue-black patches in their central parts. The bladder was contracted, in one case empty, and in the other contained about a drachm of fluid tinged red, in which was found kidney epithelium, fatty casts, albumin, and a trace of bile pigment. In Case 1 arsenic was found to be present in the liver, kidneys, bile, urine, blood, and in the fluid from the pericardium and the pleuræ. In the liver only was the amount sufficient to enable a quantitative estimation to be made; it equalled 0·002 gramme As_2O_3 for the entire viscus. In Case 2 As was found in the kidneys, spleen, and liver, in which it equalled 0·0016 gramme As_2O_3. The microscopical preparations exhibited the following characters:—Liver: The cells were swollen and cloudy, but the nuclei stained; there was no appreciable bile staining and no deposit of iron. Spleen: There were extensive congestion and slight fatty changes with failure to stain in patches. Kidney: The glomeruli were swollen, epithelium of the tubules was swollen and cloudy, and the nuclei did not stain; the bloodvessels were markedly distended; and there were granular matter and blood in the tubules. Osmic acid preparations showed fatty granules in the cells of all the three organs.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Acute Perforative Appendicitis.—Exhibition of Cases and Specimens.

A MEETING of this society was held on May 1st, Mr. MAYO ROBSON, President, being in the chair.

Mr. MOYNIHAN read the notes of a case of Acute Perforative Appendicitis in which recovery followed abdominal section. A boy aged thirteen years had suffered for three and a half days from acute appendicitis, perforation occurring towards the end of the third day. The abdomen was opened by a median incision, and the peritoneal cavity, which was found to contain offensive pus, was thoroughly cleaned and drained. By a separate incision the abscess cavity over the appendix was opened and cleansed and drained. A prolonged convalescence eventuated in complete recovery. The chief points raised for discussion were the following: 1. The question of early operation in ordinary cases of appendicitis. Mr. Moynihan quoted Dr. Ryerson Fowler, who remarks: "As soon as the diagnosis of progressive appendicitis is assured the abdomen should be opened and the appendix removed." It was urged that early operation was attended by little or no risk and that its statistical results would be found to justify the procedure. 2. The administration of opium during the first forty-eight hours. This was strongly deprecated. The first twenty-four or forty-eight hours are those in which the symptoms are gradually asserting their claim to the surgeon's attention, and their relative value is wholly impaired by the effect of opium or morphia. 3. The advisability or otherwise of peritoneal lavage was discussed, and Mr. Moynihan gave it as his firmly established opinion that the method added very considerably to the dangers of the operation and in most cases was unnecessary. The peritoneum could be as thoroughly cleansed by careful sponging with tampons of iodoform gauze. Drainage by means of strips of gauze in place of, or in addition to, drainage by glass tube was advocated. 4. The importance of the removal of the appendix in all cases of abscess. It was pointed out that in not a few recorded cases a second attack of acute inflammation had occurred in an appendix not removed during operation and that in one case at least a fatal termination had resulted. It was suggested, as a guide to treatment, that some ready rule should be adopted, such as "if at the end of a certain well-defined period a case of appendicitis is either stationary or progressive operative procedures should, without any further delay, be adopted." It was mentioned that the American surgeons would constitute twenty-four hours as the duration of this period. This was, perhaps, a little early, but it emphasised the importance of early operative procedures—an importance that could hardly be too strongly insisted upon. — Mr. BROWN objected to the early use of opium because it concealed the danger. He thought washing of the peritoneum was of great value and that there were other more important factors in the production of shock.—Dr. CHURTON thought that a large number of these patients got well without operation and could recall many cases where a peritonitis had receded after rather rapid extension.—The PRESIDENT mentioned three cases in which he had operated with success. — Mr. LITTLEWOOD thought that perforation occurring during the first attack was much more serious than when occurring in later attacks. He did not believe it possible in many cases to absolutely cleanse the peritoneum, and thought it of importance to use boiled normal saline solution for intra-abdominal lavage rather than boric acid or plain water.—Dr. GRIFFITH drew attention to the anatomical arrangement of the peritoneum around the appendix and its bearing on the mode of bursting of an abscess within or without the peritoneal cavity.—Mr. MOYNIHAN replied.

The following cases, pathological specimens, &c., were shown:—

Mr. W. H. BROWN: (1) Patent Urachus closed by operation; (2) Enterectomy after Gangrene of Umbilical Hernia (specimen and patient); (3) Extensive Keloids; (4) Recurrent Fibroid after more than twenty removals; and (5) Talipes Equino-varus treated by Phelps's method.

Dr. CHADWICK: Case of Ataxic Paraplegia.

Dr. WARDROP GRIFFITH: (1) Case of Congenital Weakness of Inter-ossei Muscles; and (2) dissections to show the "Undefended Area" of the Cardiac Septum.

Dr. MANTLE: (1) Two adult patients with Muscular Atrophy; (2) Aneurysm of the Arch of the Aorta cured by rest and the application of an icebag; and (3) Cerebral and Spinal Hæmorrhage.

Dr. CHURTON: (1) Splenic Leucocythæmia; (2) Œdema without Albuminuria; and (3) Sarcoma of the Corpora Quadrigemina and Pineal Body.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases and Specimens.—The Treatment of Inoperable Cases of Cancer.

THE ninth meeting of this society was held on May 20th, Dr. ARGYLL ROBERTSON, President, being in the chair.

Mr. JOSEPH BELL showed a patient after a Gunshot Wound of the Forearm. The bullet from a rook rifle had passed obliquely through the lower end of the radius, shattering the bone. Portions of bone and of the bullet were removed. The patient made an excellent recovery. The movements at the wrist joint were perfect. Roentgen photographs were exhibited exemplifying the condition of the radius after the wound had healed.

Dr. NORMAN WALKER showed a Powder for Photography

by Flash-light. The powder consisted of powdered magnesium and chlorate of potash on gun-cotton. It was efficacious and cheap, and by its use photographs could be taken irrespectively of the weather.

Dr. GILES also showed an Apparatus for Producing Flash-light.

Dr. GEORGE T. BEATSON read a paper on the Treatment of Inoperable Cases of Cancer. He remarked on the number of inoperable cases of cancer of the breast which he had seen in the practice of the Glasgow Cancer Hospital, and from which he had deduced a line of treatment which was opposed to the parasitic theory of cancer. The first case was that of a patient thirty-three years of age suffering from advanced cancer of the breast. After a confinement she noticed a lump in her breast. She sought advice at the Royal Infirmary, where the breast and axillary glands were removed. The wound healed well, but in three months the cicatrix broke down, discharged, and there was considerable hardness and thickening around the ulcer which formed. She was dismissed from treatment at the Royal Infirmary as in too advanced a stage of the disease for operation, the disease having returned in the whole scar. When first seen by Dr. Beatson there was a large cicatrix extending from the axilla forwards to the anterior mammary region. The whole cicatrix was a mass of recurrent carcinoma. She had the pale, cachectic appearance of a patient with advanced carcinoma. The diagnosis of cancer was confirmed by removing a portion of the tumour and examining it microscopically. The specimen was shown under the microscope and was of a typically cancerous nature. No operation was possible. The question arose, Could the disease be attacked in any other way? To discuss this Dr. Beatson glanced at the present knowledge of cancer. All were agreed that carcinoma was of the nature of an epithelial growth, that this growth spread locally and by infection through the lymphatic system, that there was no known means of arresting the growth, that cells known as cancer cells developed, that the younger the patient was the more rapid the fatal result, and that the best treatment was removal with the knife. All were agreed upon those points. All were not agreed on the local origin or not of the disease. Some thought it arose from local irritation, others from blood dyscrasia, and a third school held that in addition to the dyscrasia a local irritation was necessary. As regards "cancer bodies," some thought them specific of the disease and parasitic in nature and others described them as degenerated leucocytes or other cells. Dr. Beatson then went at considerable length into the influence of the ovaries on lactation, and the influence which removal of the ovaries had upon the mammary function in the lower animals. Was cancer of the mamma due, he asked, to an error in the function of the ovaries? When working at the Glasgow Cancer Hospital he tried the influence of thyroid extract in carcinoma of the breast. In the case described thyroid tabloids had been administered, but with no effect. As a possible method of benefiting the patient the removal of the ovaries and tubes was proposed. The operation and its effects being explained to the patient and her husband it was performed with their full consent. She made a good recovery from the operation. No local measures were taken with the breast save ordinary aseptic dressings. The thyroid tabloids were continued. A marked change in the cancer took place. The tumour became smaller and flatter and there was marked diminution in the surrounding thickening. The nodules in the axilla also diminished. The local improvement continued and four months afterwards the mammary tumour was noted to be greatly diminished in size and of a yellowish colour. All the tissues were more movable and the surrounding tissues more healthy. Six months after the operation all evidence of carcinoma had disappeared. She was now shown to the society in a healthy condition. A cicatrix extended from the mammary region to the axilla and there was absolutely no evidence of cancer either in the cicatrix or axillary glands. The second case was one of cancer of the breast in an advanced stage, which seemed to date from an injury to the breast. On admission the patient was noticed to be a cachectic, emaciated woman with a large tumour in the right breast adherent to the skin in the centre, but not fixed below. The nipple was retracted and there were large fixed glands in the axilla and extending in the neck as high as the lobe of the ear. There were no secondary deposits in other organs. No operative procedure was practicable. A microscopic section and cast of tumour were shown. She was admitted to the Cancer Hospital and during a month's residence the tumour spread rapidly. The tubes and ovaries were then removed. She made a good recovery from the operation. The breast tumour became less vascular. She felt better and the pain diminished, so that she was able to sleep at night without hypnotics. Thyroid tabloids were begun. Two months after operation, as the tumour and glands were diminishing, a nodule was removed for microscopic examination. The specimen, a carcinoma undergoing fatty degeneration, was shown under the microscope. The tumour did not diminish so rapidly as in the first case, but still the diminution was marked. Casts were shown exemplifying the condition before operation and some months afterwards. The third case was that of an unmarried woman with a large ulcerating tumour of the breast, but no glandular infiltration. A section of the tumour was examined and found to be cancerous, not tuberculous. As she had passed the menopause thyroid tabloids were given without removal of the ovaries. During the three months they had been taken no improvement was noticeable. The ulcerating tumour had spread. The thyroid tabloids had done no good, and it might be as well, Dr. Beatson thought, to remove the ovaries. He considered some pathological conditions in the ovaries the exciting cause of cancer of the mamma and female generative organs. He did not believe in the parasitic theory. He thought the ovaries in the female and the testicle in the male must be looked to for the cause of cancer. He thought that cancer cells could be ultimately shown to be germinal epithelial cells (ova). Epithelial cells became converted into germinal epithelial cells as found in the ovary, the conversion being due to some influence in the ovary. In the male the testicle seemed to have the same influence over proliferation as the ovary had in the female; this was exemplified in the horning of stags. He urged that removal of the ovary or testicle had an inhibiting influence on the proliferation of epithelial cells, and that removal of the ovaries in young nursing mothers had great influence on the development of carcinoma where local operation had failed. He did not urge the removal of the ovaries in early cases, but in *inoperable* cases. The views were problematical, but he urged the theory in the interests of those who were sufferers. The patients exemplifying the paper were shown.—Professor A. R. SIMPSON remarked that it was a well-known fact that disappearance of the ovarian function gave rise to the deposit of fat. He found from his own experience and from statistics that where both ovaries were removed patients died in an unusually large proportion from carcinoma. In Dr. Beatson's case the thyroid extract might have had some influence. The ovarian influence on the mamma seemed to be not only nervous but chemical as well.—Professor CHIENE thought that as a practical surgeon looking at the first case one would be justified in inoperable cases of carcinoma of the mamma in removing the ovaries and giving thyroid tabloids.—Mr. JOSEPH BELL said that the first case shown was one of the most remarkable he had ever seen in his life. The case was cured, and he thought all similar cases should have a like chance at the hands of surgeons. He had, however, seen a good many cases like No. 2, in which with the shrinkage of the whole woman a shrinkage in the tumour and glands took place.—Mr. STILES congratulated Dr. Beatson on the clear, modest, and cautious manner in which he had stated his case. The facts after seeing the first case and the specimen could not be disputed. He agreed in not regarding cancer bodies as parasites. In slowly growing tumours of the mamma the death-rate of the cells was almost as great as the birth-rate, and in rapidly growing tumours the opposite was the condition. He thought that removal of the ovaries might check the birth-rate. In the first case the patient was a young woman, and the ovaries had great influence on the mammary gland, and removal checked the birth-rate of the cells. He did not think that removal of the testicle could have much influence on the growth of cancer.—Dr. WALKER, Dr. JAMES RITCHIE, and Dr. LUNDIE took part in the discussion.

EDINBURGH OBSTETRICAL SOCIETY.

Exhibition of Specimens.—Some Modifications of Midwifery Forceps.—Criminal Abortion in the Punjab.—Technique of the Dilatation of the Perineum in Labour.—Teratogenesis: an Inquiry into the Causes of Monstrosities (Part II.: Theories of the Past: Physical Causes).

A MEETING of this society was held on May 13th,

Professor SIMPSON, in the absence of the President, being in the chair.

Surgeon-Captain CHARLES H. BEDFORD sent some Abortifacients used in India for exhibition: the roots and twigs of Plumbago rosea, "Lal Chitra," which externally and internally act as an irritant, and are used to procure abortion (rarely for homicidal poisoning); the Fruit of Terminalia bellirica, which acts as a narcotico-irritant poison; Markingnuts; drupes of Semecarpus anacardium; "Bhilawa" juice, which is applied to the cervix-uteri as an abortifacient; and also abortion sticks, "battis," from the Punjab; the sticks are dressed with cotton-wool which is smeared with an irritant paste of nutmeg, arsenic, juice of Calotropis gigantea, jequirity seeds, carbonate of sodium, aloes, &c., and then passed into the cervix uteri.

Dr. J. W. BALLANTYNE showed an Anencephalic Fœtus; there had been scarcely any liquor amnii present.

Dr. G. OWEN C. MACKNESS read a paper on Some Modifications of Midwifery Forceps. He said that the handles in an ordinary pair of forceps served as a means of introduction of the blades and also afforded a grip while traction was being effected. In the axis-traction forceps the handles served, as before, for the introduction of the blades, and they also acted as indicators for the axis of traction. These handles were not now used for traction, and they therefore seemed unnecessarily long and heavy for the purposes which they required to fulfil. He had had forceps constructed where these handles were reduced from six to three inches; he had used them in many cases and found that they were more easily applied with the patient in a confined space or where there was no skilled assistance to get and maintain her in a suitable position. They were lighter and less cumbersome, and in occipito-posterior cases during rotation the handles were much less liable to jam against the thigh. The centre of gravity of the forceps was brought nearer to the blades and therefore nearer to the point where the power was applied. He had also altered the plate attached to the traction handle for the reception of the buttons on the ends of the traction rods. By cutting away the bridge which separated the apertures for the insertion of the buttons more space was allowed for their rapid removal, and the difficulty in their disconnexion, when the blades were widely separated by an unusually large head, was thus overcome. There was no binding connexion between the traction rods. These were made separable from the blades, but the end of the rod and the slit in the blade for its reception were so formed that it was impossible for them to slip out when the forceps were in use. The fixation screw was made very strong and was placed at the end of the application handles. The instrument was made entirely of metal, and the handles were roughened to prevent slipping during their use.—Professor SIMPSON preferred the full length for the application handle so as to effect more easily the manipulation of the blades on the head and their locking afterwards. He was favourable to the placing of the fixation screw at the extremity of the handles and commended the forceps as a step towards simplicity.—Dr. FORDYCE and Dr. MCVAIL took part in the discussion.

Surgeon-Captain CHARLES H. BEDFORD sent a paper on Criminal Abortion in the Punjab, which was read by Dr. J. W. BALLANTYNE. The cases occurred during twelve months previously to November, 1894; the facts detailed were derived from the official reports of the local medical officers and police, these including the post-mortem examinations and the symptoms noted during the treatment of the cases. Surgeon-Captain Bedford also included his chemical and special examination of the articles and viscera sent to him. Twenty-six cases were referred to him during the year indicated and death had occurred in all. These probably only represented a very small fraction of the fatal cases of criminal abortion occurring in the Punjab and an infinitely smaller proportion of the non-fatal cases. They occured mostly among the unmarried; widows debarred by the social customs of the country from re-marrying were the principal offenders. The production of abortion was principally in the hands of native nurses and midwives and male native quacks, who used methods in use in India for probably hundreds of years. The administration of substances by the mouth for the purpose in view was less common than by local means. The paper explained the Indian law on the subject and compared it with the English. The general means employed in India were emetics, purgatives, irritants, ecbolics, &c. The local means generally consisted in the introduction into the os of some medicated twig or bougie or by the application of irritant substances in the form of a paste to the os uteri either by the finger or on cotton-wool. Death might occur from sepsis after the abortion had been induced or by peritonitis from injury to, or even perforation of, the uterus. The substances employed as abortifacients in these cases were various: nutmeg and arsenic were employed in four cases; opium in two cases; crude carbonate of sodium, black pepper, mercury, croton and aloes, alum and saffron, each one; and portions of twigs or "battis" were found in four cases. These were pieces of wood a few inches in length, dressed at one extremity with cotton-wool (just as a uterine sound would be), and this end was smeared over with a paste of pounded nutmeg or with arsenic. Other substances were used for this purpose—jequirity, madar juice, croton seeds, quicklime, &c. At other times these substances were applied on pledgets of cotton-wool and placed by the finger on the os uteri and left there. Occasionally the "batti" was extracted after a time, more cotton-wool applied, re-charged and again inserted; this was repeated until the os was dilated, when the membranes were ruptured. Or three or four "battis" might be inserted alongside one another. Out of the twenty-four cases four occurred at the third month, eight at the fourth, five at the fifth, and one at the sixth month. Post-mortem examination revealed in one case a portion of the twig penetrating the isthmus uteri, in another the cotton-wool was found in a wound of the uterine wall, in another a twig was found *in utero*, and a pledget of wool smeared with arsenic was found in the cavity of the cervix in another. Septicæmia and peritonitis were the causes of death in ten cases, two died from opium poisoning and one from aconite and opium. Abortion had occurred in twenty out of the twenty-six cases before death.

Dr. G. COROMOLAS (Calamata, Greece) sent a paper on the Technique of the Dilatation of the Perineum in Labour, communicated by Dr. J. W. BALLANTYNE. The woman being placed in bed on her back or left side with the legs as in natural labour, the vagina and external parts were thoroughly washed and rendered aseptic. The hands of the accoucheur were also carefully prepared and smeared with an ointment of vaseline with 6 per cent. of cocaine and antipyrin. The perineum, vagina, and os uteri were also anointed with this. The accoucheur then passed four fingers of one hand within the vaginal orifice and made some semilunar movements, first at one side and then at the other, so as to dilate the perineum. After having made three or four powerful movements he introduced the fingers of the other hand and repeated the same procedure. When the requisite degree of dilatation was achieved he then passed the fingers fully into the vagina until the index, middle, and ring fingers touched the os uteri; the same movements were again carried out, the perineum being then pushed outwards by the palmar surface of the hand. This was persevered with until he felt the presenting part pressing upon the dorsal surface of the fingers. By this proceeding the perineum and labia were guarded against rupture and labour was hastened. The use of the analgesic ointment allowed of delivery without severe pain.

Dr. J. W. BALLANTYNE read a paper on Teratogenesis: an Inquiry into the Causes of Monstrosities (Part 2: Theories of the Past: Physical Causes). The early Greek philosophers looked for purely physical causes of monstrosities; these they found in disturbances of the natural phenomena of reproduction. Their views upon reproduction varied; some regarded the semen as the sole or principal factor and the woman was only a temporary abode for the fœtus. Others were of opinion that the menses supplied the material in generation and that the semen was of comparatively little importance; others, again, believed that both were necessary. The menstrual blood seemed sometimes to have been called the female semen, and the sex of the fœtus was supposed to be due to the greater strength of one or other seed. Another notion was that boys were generated in the right testicle and girls in the left, or the sex depended on the side of the uterus which received the deposition of the semen. Another belief which influenced their views of monstrosities was the supposed fertility of animals of different kinds with one another or even with man. Monstrosities were considered by some to be due to abundance or defects of the semen, from slowness of movement, from division of it into several parts, or from aberration of movement. The menses were believed by some to play an important part in the generation of monsters. This was largely due to Hebrew legislation regarding coitus during or immediately after the flow, as an infant conceived at that time was regarded as certain to be either an epileptic, a

cretin, a drunkard, or insane. In classic mythology Vulcan was begotten by Jupiter when Juno was menstruating. Pliny and writers in the Middle Ages attributed maleficent powers to the menses as regards vegetables, metals, glass, trees, and even animals, so it was not to be wondered at that writers found in it one of the causes of deformed births. The theory that monstrosities were due to human and animal intercourse held some ground even down to the Middle Ages, so that if a woman gave birth to a fœtus in any way resembling an animal she ran very considerable risk of being burnt alive with her offspring and the animal supposed to be implicated. Such a fate befel a woman in Copenhagen in 1683 as a result of the birth of an anencephalic fœtus. Suspicion also fell upon an animal that brought forth a fœtus in any way resembling the human type, as a hydrocephalic foal or calf, and Albertus Magnus saved a shepherd's life by announcing that such an event was due to stellar influence. It was not till the beginning of the eighteenth century that a strong protest was made against the belief in the hybridity theory of teratogenesis.

Reviews and Notices of Books.

Occasional Papers on Medical Subjects, 1855–1896. By W. HOWSHIP DICKINSON, M.D. Cantab., F.R.C.P. Lond., Hon. Fellow of Caius College, Cambridge; Consulting Physician to St. George's Hospital and to the Hospital for Sick Children, Great Ormond-street; President of the Royal Medical and Chirurgical Society; Corresponding Member of the Academy of Medicine of New York. London, New York, and Bombay: Longmans, Green and Co. 1896.

THERE are two main points from which improvements in medicine in this century start and to which nearly all that distinguishes modern medicine so creditably can be traced; the first is the work of Richard Bright on the kidney, dating back to 1827, and the other the work of Pasteur adopted and applied and developed in this country by Lister. From these two pieces of work respectively date the chief researches of physicians and surgeons which have revolutionised our conception of the structural basis of disease and of its causes. Amongst English physicians who have worked hard and appreciatively on the lines of Bright is the author of the work which we have much pleasure in commending to our readers—not the less so since our own pages have been the medium through which the profession made the acquaintance of not a few of his papers. It is characteristic of Dr. Dickinson not only to have the keenest sense of what constitutes the clinical evidence of disease, with a refined eye for its minutest features, but to have the industry to follow his fatal cases to the post-mortem room and to exact from them the fullest information, accepting most candidly whatever they have to tell either in support of his previous diagnosis or otherwise. The Occasional Papers are the result of this double study of disease at the bedside and post mortem. Two other qualities of the author go to make the papers, already full of instruction, also very readable. The first is—shall we say?—a slightly pugnacious mental element giving enjoyment by the demolition of a theory which does not seem to him tenable, whether it be the embolic theory of chorea or the usually accepted theory of the so-called presystolic murmur. The second is a singularly clear and good style of writing, founded on the best English classics, a style which has placed Dr. Dickinson's works in the front of our medical literature.

The papers cover a large number of subjects which are of interest to all practitioners. The whole constitute a volume of 247 pages, to which there is a useful index. We need not enumerate all the papers—eighteen in number—but the mention of the following will suffice to show that they touch at once the deepest questions in pathology and such as are of daily interest in medical practice on the Action of Digitalis on the Uterus; Three Cases of Angina Pectoris depending upon Occlusion of the Mouths of the Coronary Arteries; on the Enlargement of the Viscera which occurs in Rickets; on the Pathology of Chorea; on Chorea with reference to its Supposed Origin in Embolism; on Cirrhosis of the Liver in Childhood; on Hereditary Albuminuria; on the Morbid Effects of Alcohol as shown in Persons who trade in Liquor; on Albuminuric Ulceration of the Bowels; on the Cardio-vascular Changes of Renal Disease, with some Observations on the Larger Arteries; on the Practice of Medicine at St. George's Hospital Forty Years Ago; on the Presystolic Murmur falsely so-called; and on Alkalies in Rheumatism. The last paper is a very important deliverance on the respective use of alkalies and salicylates in acute rheumatism based on forty years' experience. It seems to show conclusively that the alkalies used freely, as described, protect the heart as no other treatment does, though Dr. Dickinson associates with them the salicylates. The paper on Alcohol is a grave indictment against the free use of that substance. The article on Medical Practice Forty Years Ago shows vividly how recently the practice of medicine, even in the hands of such philosophers as Dr. Thomas Young, consisted of methods which we should be glad to forget.

Journal of Anatomy and Physiology, Normal and Pathological, Human and Comparative. Conducted by Sir GEORGE M. HUMPHRY, Sir WM. TURNER, and Professor J. MCKENDRICK. Vol. XXX. Part 3. April, 1896. London: Charles Griffin and Co. Price 6*s*.

THE present part contains sixteen articles, which are as follows: 1. Arthur Robinson, M.D.: Formation and Structure of the Optic Nerve and its relation to the Optic Stalk, with one plate, an article which we notice on another page. 2. E. W. Carlier, M.D.: On the Pancreas of the Hedgehog during Hybernation, a gland which he found to, his surprise to be in a moderately active state. He describes the microscopical characters of the gland at considerable length. 3. Keith Campbell, M.B.: An Accessory Segment in the Pulmonary Valve, with an engraving. 4. Studies in the Peritoneum, its Arrangement in Animals, by Byron Robinson, M.D., of Chicago. In this paper the author gives the results of his examination of a considerable number of animals, such as the cat, dog, ferret, polecat, badger, otter, pig, and rabbit. 5. J. H. Sequeira, M.D.: A Case of Ectopia Vesicæ, with Patent Vitelline Duct. 6. Edred M. Corner, B.Sc.: Some Structures in the Elbow-joint. 7. The same author on the Temporal Fossa. In both papers a very careful description is given of the structures forming the joint. 8. Mr. Corner also describes the processes of the Occipital and Mastoid Regions of the Skull, especially commenting on the processes named in some works of anatomy the "paramastoid" and "paroccipital," both of which he considers to have been frequently present. 9. E. Barclay Smith, M.D.: On the Astragalo-calcaneo-navicular Joint, giving a very exact account of the bones and the ligaments of this joint. 10. David Hepburn, M.D.: Observations on the External Appearance and Visceral Anatomy of the Grey Seal (Halichoerus Grypus.) 11. Johnson Symington, M.D., Professor of Anatomy at Queen's College, Belfast: On the Homology of the Dumb-bell-shaped Bone in the Ornithorhynchus, in which the different views are discussed of this peculiar bone. 12. What is Sibson's Muscle? (Scalenus Pleuralis) by Professor Edward Fawcett, M.B. 13. Hereditary Polydactylism, by Gregg Wilson, M.A., in which the disposition of the bones of the hand is given by the Roentgen ray process. In addition to the above items there are a Report on Recent Teratological Literature by B. C. A. Windle, M.D., and the Proceedings of the Anatomical Society of Great Britain and Ireland.

Domestic and Sanitary Drainage and Plumbing. By WILLIAM R. MAGUIRE, Associate of the Institution of Civil Engineers of Ireland; Registered Teacher of Plumbing, City and Guilds of London Institute; and Registered Master Plumber, Worshipful Plumbers' Company, London, &c. Second Edition. London: Kegan Paul, Trench, Trübner and Co., Limited. 1896. Price 12*s.*

THE second edition of a book, unless it shows some very marked improvement over the first, does not usually call for more than a passing notice, but the subject with which this volume deals is so very important to the health of the public that a brief *résumé* of its contents may not be out of place. It is not necessary at the present day to dwell upon the connexior between plumbing and health, or rather bad plumbing and bad health, but with regard to this subject there is reason to believe that the general public do not show that amount of interest which for their own welfare they should do. The book consists of a series of lectures, delivered at the Central Technical Institute at South Kensington under the auspices of the City and Guilds of London Institute for the Advancement of Technical Education acting in conjunction with the Worshipful Company of Plumbers, which were primarily delivered for plumbers and engineers, but all who live in a dwelling of any description will peruse the book with advantage. The author fully appreciates the need of workmen thoroughly understanding the scientific principles upon which their work is based. In one of the early chapters he says:—

"Popular education in physics ..... has been so neglected that very few otherwise well-educated people are prepared to explain, or even to understand, the causes of the most simple practical phenomena occurring daily within their observation ..... the world is looking for plumbers and for technical teachers of plumbing who make it their aim to know their business thoroughly. Knowledge of the forces of nature is more essential for plumbers than for the artisans of many other trades."

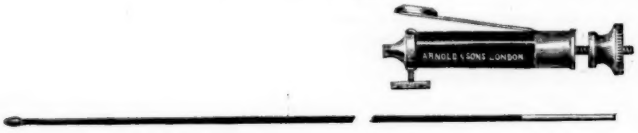
These words give some idea of the position the lecturer takes up and the exposition of energy and matter which follows is succinct but practical. Hydrostatics, hydraulics, and aerometry are treated in an elementary but thoroughly practical manner, and heat receives considerable attention. Sewage Disposal, Sewerage and Drainage, and Water Supply from the plumber's point of view are the heads of chapters which show the writer to be a practical man. The chapter on Sanitary Appliances is a valuable one inasmuch as without dogmatising on the advantages of any one particular maker's wares it shows the construction of the various types of apparatus—in many instances giving sectional drawings clearly showing their action—and describes in detail the qualities which all sanitary appliances should possess. Some thirty pages are devoted to the important question of hot water supply, and the cause and prevention of domestic boiler explosions are lucidly discussed. The book, which is well illustrated, should be read not only by plumbers and those engaged in the building of houses but also by every owner or occupier of a house who wishes to understand some of those details which govern the healthy construction of his habitation.

New Inventions.

SOME NEW RHINOLOGICAL AND OTOLOGICAL APPLIANCES.

I DESIRE to draw attention to a few appliances which will be found of use in the treatment of certain nose and ear affections. My former rheophore, made of gum elastic with steel wire and silver knob, had the disadvantage that it could not be passed into the Eustachian tube. The one I now show (Fig. 1) can be readily passed through the Eustachian catheter, and is then easily connected with the lever contact handle by the small screw shown in the illustration. It has been perfectly made for me by Messrs. Arnold and Sons.

FIG. 1.—RHEOPHORE.



The turbinotome (Fig. 2) will be found useful for removal of portions of the inferior and middle turbinals when such a procedure is required. There is a strong spring in the handle which increases considerably the driving force of the blade, the cutting edge of which is crescentic in shape to prevent jamming. It also is made to my design by Messrs. Arnold and Sons.

FIG. 2.—TURBINOTOME.

The bougies which are shown in Fig. 3 are modifications of Mackenzie's and Stoker's. They have the advantage of being perfectly pliable, can be bent into, and retained at, any angle, or even twisted on their own axis. This has been achieved, at my suggestion, by Messrs. Arnold and Sons, who have made these bougies for me, six sizes being contained in a small flat box. They are most useful both for diagnostic purposes and as nasal dilators. The pliability is obtained by a thin layer of lead, which is covered by gum elastic.

FIG. 3.—BOUGIES.

Harley-street, W. H. MACNAUGHTON-JONES.

THE LANCET.

LONDON: SATURDAY, MAY 30, 1896.

THE General Medical Council will meet on Tuesday next at two o'clock in its new chamber, which is not quite so ample as the old one, but it is well ventilated and lighted and promises also a decided improvement in regard to acoustic qualities. The Council will find itself without a President, for the term for which Sir RICHARD QUAIN was appointed President expired on Tuesday, the 26th inst. He still continues to be, as he has been since the year 1863, a representative of the Crown, with an almost unparalleled experience of the proceedings and the business of the Council. It is not improbable that the Council will be glad to have Sir RICHARD QUAIN in the chair as long as he is willing to occupy it. Though well entitled to a less arduous seat, the Council may do worse for the present than ask him to retain the office which he has filled so well. There will be two new members in the Council well qualified to give weight to its deliberations—the one Sir WILLIAM ROBERTS, in the place of Dr. WILKS, as representative of the University of London; the other, Dr. W. THOMSON, direct representative for Ireland, in place of the late Dr. KIDD.

It is difficult in the absence of the programme of business to forecast with accuracy the subjects to which the Council will devote most of its time. But even so, it is not impossible to anticipate some of the chief questions with which it will have to deal. As on most occasions, these arise out of previous proceedings of the Council in relegating to the Executive Committee or some of the special committees of the Council subjects for consideration and report. A resolution of the Council in November, proposed by Dr. GLOVER, required the Executive Committee to consider the subject of the disciplinary functions of the qualifying medical authorities and of the General Medical Council, and to report to the Council at its approaching meeting on the best means of further defining and confirming these functions and bringing them into harmonious and efficient coöperation. The saving in time and funds to the General Medical Council will be immense if the qualifying authorities will do their duty, and the profession will be disappointed if some practical suggestions are not forthcoming for making all bodies which confer diplomas or degrees primarily responsible for the professional conduct of their diplomates. The Executive Committee has already gathered a large amount of information on the subject and has relegated to a sub-committee the power to take legal advice on the question, with the view of extending, where necessary, disciplinary powers to the medical authorities. This may require an application to Government for legislation, but the Council would be well supported by the profession in any such application, and it would be the more likely to be heard inasmuch as it has used its own penal powers with almost excessive moderation and been slow to ask for more. A subject of great interest will be raised by a motion of which Mr. TEALE gave notice six months ago regarding "the present system of accumulated examinations and the enormous increase in the number of rejections resulting from it." The full text of his resolution will be found in another column. No one who knows Mr. TEALE will think that he would be a party to any lowering of the standard of medical education or efficiency, but the examining system is assuming prodigious proportions which do not necessarily involve any increased efficiency in those who pass. Mr. TEALE draws a distinction between what a man should know and what he should "know about," and we may be certain that if he would restrict the area of examination he would not restrict its thoroughness.

The General Medical Council will have to revert to a consideration of its duties in regard to the Apothecaries' Hall of Ireland under circumstances of the most delicate character. By its past action—taken certainly in good faith and for very weighty reasons—it has involved the Privy Council in a question foreign to its tastes and in which it is entirely inexperienced. The Privy Council has suggested to the General Medical Council through its legal representatives that the latter body might see its way to appoint examiners, not only surgical but medical. The question is not an easy one and in all probability there will be considerable discussion thereon. Much, too, may depend on the way in which the Apothecaries' Hall prepares its new application. In any case the General Medical Council is associated with the Privy Council for the first time in its history, and it will be interesting to see how the two bodies coöperate for the settlement of a question — not great, perhaps, but delicate — in the politics of a profession which has hitherto been so well governed from within as to make the interference of the Privy Council unnecessary. No one who watched the proceedings of the Privy Council could fail to see that their lordships were reluctant to interfere and were in no way anxious to violate the domestic government of the profession.

The General Medical Council has so clearly and fully expressed its views on legislation for regulating the practice of midwives or midwifery-nurses that it may not feel itself called upon at the present meeting to spend more time over it. But a report may be expected from a committee on midwifery diplomas—that is, on documents issued by the Rotunda Lying-in Hospital and the Coombe Lying-in Hospital purporting to be diplomas and to be recognised by the Local Government Board as qualifications in midwifery. This assumption of the right of "qualifying in midwifery" on the strength of six months' training, and in the face of the Act of 1886, by hospital officials, unrecognised in the schedule of the Medical Acts is a very serious matter on which the Council should be very explicit. The Education Committee will have to report on the Recommendation of the Council on the subject of Practical Teaching in midwifery raised by a petition from the council of the British Medical Association. This recommendation has often been discussed, and is regarded by many critics as being altogether inadequate and unworthy of the Council. If it emerges again unscathed from the Education Committee it will be a greater wonder than ever. A revised list of

preliminary examinations held in the United Kingdom will be proposed by the Education Committee, and the Examination Committee will report on the consolidation of the recommendations of the Council respecting examinations in relation to the amendments adopted at the last meeting of the Council. The Report of the Pharmacopœia Committee may be expected to announce the progress of the preparations for a new edition of the Pharmacopœia, conceived in a more imperial spirit than its predecessors and with a little more adaptation to medical uses, but not otherwise greatly altered.

These are the subjects to a consideration of which the Council is committed, and which may well occupy the time which it ordinarily spends over its summer meetings. Besides these it may be assumed that there are various charges of professional misconduct to be investigated which will occupy a day or two of the time of the Council. It was reported in the newspapers that the Alliance of Medical Aid Associations had resolved to appeal to the General Medical Council as complainants against their medical officers. It remains to be seen whether bodies which in the opinion of the profession have done so much to degrade the public estimate of medical service will have the courage to seek redress from the General Medical Council. It is scarcely likely that the Council which resisted the appeal of the profession will be moved by that of the associations. It may nevertheless have the opportunity through its President of saying a word in season to the representatives of the associations on their duties to the medical profession.

PROHIBITIVE legislation with regard to liquor is one of the most difficult problems in the whole range of practical politics. The question is indeed so difficult and so much embittered by controversy that there is the more need for spreading knowledge regarding it and for endeavouring to the utmost of our ability to profit by the experience which is being gradually accumulated in various parts of the world regarding the best means of grappling with what is universally admitted to be a great evil. Temperance reformers are not always well informed and are too apt to assume that their pet panacea would manifestly accomplish all the wished-for objects and soon afford us the spectacle of a transformed world. More cautious thinkers admit the evil but question the efficacy of most of the suggested remedies and are shy of committing themselves to schemes which might remove or palliate some of the evils of the existing system at the expense of calling into existence perhaps even greater evils. The question is eminently one for calm and judicial consideration, and in no other field of reform is it more imperative that we should profit to the utmost of our power by the successes or failures of other nations and countries. Mr. LECKY points out very justly that "the increasing sensitiveness of public opinion to questions of drink is very far from implying that the evil itself is an increasing one. There is strong reason to believe that the exact opposite is the case. A hundred years ago drunkenness was rather the rule than the exception among the upper classes; but with changed habits, and under the stress of public opinion, it has in this section of society almost disappeared. There are, no doubt, still some dissipated circles where it may be found, and most physicians can point to cases among the upper classes of secret drinking, which is, perhaps, usually of the nature of a disease; yet it is probable that many of my readers may have moved widely and constantly through good society, mingling with men of various tastes, habits, and professions, without having ever seen at a dinner-table a case of positive drunkenness." We entirely endorse this view, but we are not confident that any similar change for the better has taken place in the lower ranks of society. Mr. LECKY believes that there has, and we can only hope that it is so. We will not follow the distinguished historian through his very just but somewhat obvious remarks that much drunkenness is due to miserable homes, bad cookery, impure or deficient water-supply, unhealthy conditions of labour, adulterations, want of innocent and wholesome amusements, and so on. On these points much might be said, but the conclusions which the facts suggest are, on the whole, self-evident. We prefer at present to devote the space at our disposal to an endeavour to sum up the valuable facts detailed by Mr. LECKY regarding the various prohibitive or repressive measures attempted in various countries in relation to the liquor traffic.

Scotland led the way in these islands by a Sunday closing measure passed in 1854, Ireland followed with a similar measure in 1877, and Wales in 1882. Similar legislation has already been adopted in nearly all the colonies. It is in the United States, however, that the most determined efforts have been made to grapple with the drink-evil. Prohibition was adopted in the State of Maine in 1851, extended in its operations in 1877, and made part of the State Constitution in 1884. Other States have followed this example, but the fate of prohibition in America has been a curious and instructive one. "At the close of 1894 there were seven States in which the manufacture and sale of spirituous and malt beverages were forbidden, though the citizens of those States may obtain them for their own private use from other States. Nine or ten other States had tried prohibition and abandoned it, and they include some of the most important and populous States of the Union, amongst others New York, Massachusetts, Ohio, Illinois, and Rhode Island." It would appear that prohibition has achieved a certain amount of success in thinly populated territories—although even in these it has been the occasion of extensive smuggling and illegality—but that it has been almost a complete failure among the large centres of population. More success would seem to have attended the system of making the licences expensive and legalising some degree of local option. Canada has followed somewhat similar lines of policy. The Scott Act of 1878 provided that "on the petition of a quarter of the electors of any town or city a direct vote should be taken on the question whether it should be placed under the provisions of the Act. If a bare majority of the voters desired it, the question was decided for three years. In that case all public-house licences lapsed at the end of the year without compensation to the owners, and the ordinary manufacture and sale of intoxicating liquors as a beverage was absolutely prohibited." This system proved a failure in practice, and as a general rule the

former licensing system has been resumed. In New Zealand a somewhat stringent system of local option is in force. In most of the other Australasian colonies "the principle of local option, limiting the number of licences in a given district, generally prevails, though with considerable variations of detail and with considerable degrees of stringency." In Scandinavian countries the well-known Gothenburg system has been extensively adopted. By this scheme the sale of spirits and wines is granted as a monopoly to a company composed of leading citizens, who bind themselves by charter not to derive any profit from the sale of these liquors, the company being also empowered to sell malt liquors, coffee, tea, soda- and seltzer-water, cigars, and food at the ordinary scale of profits. The results of the general adoption of the Gothenburg system in Sweden and Norway have been very striking. Intemperance has been immensely reduced, "the consumption of spirits has shrunk to a mere fraction of the former amount," beer has largely replaced spirits, to the great benefit of the community. In Switzerland, where drunkenness had assumed alarming proportions, drastic measures were adopted in the year 1887. A law was passed prohibiting private distilling, and the State became the one wholesale spirit merchant. It was enacted that one-fourth of the spirits sold should be distilled in Switzerland, that the profits of the monopoly should be distributed among the different cantons, and that at least one-tenth of the surplus revenue should be employed in some way calculated to counteract the evil effects of alcohol. Considerable success has attended this measure and the consumption of spirits has been reduced 20 to 25 per cent.

We shall leave the above facts to speak for themselves. They seem to point emphatically to two or three conclusions. They show that the drink-evil is a real one, and that many countries have been compelled to face it. They show that the policy of prohibition has been, on the whole, a decided failure. They show that great success has attended prudent measures of regulation and repression. The logical deduction would seem to be that we must in this country prepare ourselves for some developments of legislation with regard to liquor, and that while we should view with great suspicion all extreme, tyrannical, and confiscatory schemes, we should lend a patient and attentive hearing to any moderate and well-considered measure of reform.

No words of greater weight than those we recently quoted from Mr. LECKY'S work on "Democracy and Liberty"[1] are needed to advocate the right of medical men to a place in the House of Lords as a reward for the services which they render to their country; but there is another argument which may be put forth, not resting on the claim of medical men to be rewarded in common with members of other professions for their services by admission to the Peerage, but founded on the advantages which might accrue to the country if the medical profession were represented in the Upper Chamber. Surely it is an anomaly that, while the highest legislative body in the land numbers among its members men learned in the law and in the making of laws, there should be none who possess by special study a knowledge of a subject with which an important part of those laws deal, the subject of public health. We say "an important part" advisedly, for on the health of a nation depends in a great measure its wealth, and the wealth of a nation, all other things being equal, is a criterion of its power. Not only is it an anomaly, therefore, but to a country like England a reproach, that among those who possess the right to veto measures brought in by the Lower House dealing with matters on which the whole stability of the country must ultimately depend there should be no member who can boast of a practical knowledge of medicine, knowledge upon which the great work of sanitary reform—"the noblest achievement of our age," as Mr. LECKY says—is based.

In days gone by, when little or no attention was given by our legislators to sanitation, there may have been some excuse, although no justification, for the omission of medical men from the House of Lords; but in the present day, when the importance of laws relating to public health is becoming more and more recognised, the filling of such a gap would be in keeping with the progress of the age and materially assist the work of sanitary reform. Endeavours have been made to educate the people in the laws of hygiene, and their representatives in the Commons can be trusted to a certain extent to see that the national health is looked after. But the House of Lords is not an elected body, and, therefore, whatever may be the wishes of the people they have no power to place representatives in the Upper House. To rightly deal with matters on which the health of the public depends involves a knowledge only to be gained by the study of medicine, and though it is true that there are in the House of Lords men of high scientific attainments who, by reason of their special knowledge, are able to take a scientific view of health questions, such details as can only be rightly understood by a medical man have practically to be left to the care of those who by necessity must have only a theoretical knowledge of such matters. In certain cases expert advice is absolutely necessary, and special committees are appointed to deal with special questions before they are dealt with by the Legislature, but how much time and how much expense might be saved to the nation if the legislative body in the first instance were partly composed of those whose training gave them the right to deal with the subject practically? A distinguished member of the House of Lords has himself seen the desirability of the creation of medical peers. Lord REAY, commenting at a recent dinner on the absence of the medical profession from the Upper Chamber, said: "We should be all the better for expert advice in the House of Lords," and no truer remark could have been made: the country would indeed be undoubtedly "all the better" if the roll of the peerage contained the names of men learned in medicine as well as of men learned in law.

This being so it would have afforded us the greatest satisfaction and pleasure—and in saying this we can claim to represent the feeling of the whole of the medical profession—if the recent list of peers among the Birthday Honours had included the name of one whose services to the nation and to humanity, in the introduction

[1] THE LANCET, May 2nd, 1896.

of antiseptic surgery, have received universal recognition. Such services are indeed beyond reward, but the admission of the President of the Royal Society, the recipient of numerous honorary distinctions from universities and learned societies, both English and foreign, would add lustre to the peerage. It is from amongst such men that the Second Estate of the Realm should be reinforced if, as it should, it is to contain the real nobility of our land. It is equally a matter of surprise and regret that this occasion should have passed without other leaders in medicine, science, and literature receiving that recognition from the Head of the State which is so freely accorded to the politician.

Annotations.

"Ne quid nimis."

THE CHURCH ANTI-VIVISECTION LEAGUE AND HOSPITAL SUNDAY.

WE have received the following, which we print exactly as it stands:—

158, Lancaster-road, W., May 7th, 1896.

DEAR SIR,—Our Committee feels that the approach of Hospital Sunday makes it desirable to bring before you the great influence the Clergy have in their power to exert towards the diminution of Vivisection by stipulating as a condition of assisting the Mansion House Fund by their offertories that they shall only be given to those hospitals which have no vivisectional laboratories attached to them. The Committee is aware that the Mansion House Committee may very likely refuse compliance with this condition at first, but if made by many of the Clergy it must ere long succumb to the force of public opinion, and the Clergy will find this change heartily welcomed by many members of their congregations who now scruple to contribute on Hospital Sunday. So long as the Clergy contribute to the support of those Hospitals which have laboratories attached to them they are directly supporting and subsidising vivisection, and they are alienating from the Church an increasing number of their people. Great and solemn, therefore, is the responsibility of the Metropolitan Clergy in this matter. If there are any Clergy who doubt the urgency of the case the Committee of the Church Antivivisection League will be glad to supply them with full information and proof of the assertions contained in this letter.

Signed by order of the Executive Committee,
E. A. SABEL, Hon. Assist. Secretary.

We have no idea who the members of the Church Anti-vivisection League may be, whether laymen or clerics, or what the standing of the latter may be, and we are not now going to argue the question from the scientific point, but in view of the statement that an increasing number of people are being alienated from the Church by the support given to vivisection by the clergy we would ask the Church Anti-vivisection League for proof of this alienation. Also, can the League point to any definite condemnation of vivisection by any branch of the Church? It may be argued that neither has the Church approved of it, and she has not in so many words; but with regard to the relation of animals to man various divines have spoken clearly. St. Thomas Aquinas: Summa, Q LXVI., Artic 1. As to whether man has a right of dominion over animals, &c.: "Per rationem et voluntatem potest uti rebus exterioribus ad suam utilitatem, quasi propter se factis, semper enim imperfectiora sunt propter perfectiora." St. Augustine, writing of animals, says: "Justissima ordinatione Creatoris et vita et mors eorum nostris usibus subditur." To come down to later times the Rev. Stephen Hales was not only a cleric but a vivisector and a most accomplished physiologist. We should say that these authorities would weigh more with the metropolitan clergy than the manifesto of the Church Anti-vivisection League, and to this body we wish to point out that no portion of the Hospital Sunday Fund is devoted to any medical school, so that we fail to see how by contributing for the relief of the sick and needy the clergy subsidise vivisection. Useless cruelty, of course, is to be avoided as being irrational. In saying this we know that our opponents will say, "Exactly—all reason and no heart." But we use the word irrational in its philosophical sense. No one deprecates cruelty more than we do. Ludwig, perhaps the greatest physiologist and most persistent vivisector that ever lived, was noted for his humanity and love of animals. We would commend to the notice of the Church Anti-vivisection League a sermon preached at St. Peter's, Vere-street, on Oct. 25th, 1871, by the then incumbent, the Rev. J. C. Coghlan, and a very admirable paper which originally appeared in the *Irish Ecclesiastical Record*, "Vivisection and Theology," by Mgr. J. S. Vaughan.

"THE OPTICIAN *v.* THE OPHTHALMIC SURGEON."

WE are glad to find that our remarks on "The Optician *v.* the Ophthalmic Surgeon," in a recent number of THE LANCET,[1] have been taken in good part by a well-known optician, whose letter we print, and who appears to coincide with the views we expressed. It is precisely because (to use the words of our correspondent) the advances of our knowledge during the last few years have "lifted the whole matter into the professional sphere" that it behoves opticians to be chary of prescribing glasses, however competent they may be to determine the precise lens, or combination of lenses, required. Even in this respect there are limitations to their powers, for the optician would not be justified in employing atropine, without the use of which in many cases the appropriate glasses cannot be ascertained. Ophthalmic surgeons have reason to be grateful to the opticians for the beauty and perfection of the lenses they supply, and for many useful suggestions they have made in regard to mounting, and we are sure that in the long run those opticians will thrive best who will devote their energies to the perfecting of their apparatus and the development of the resources of their art. Though they may be thoroughly competent to deal with the physical aspect of the question, additional and special medical knowledge is required to determine whether it is advisable to *adopt* these very measures which, from a physical point of view, leave nothing to be desired.

PROPOSAL TO REDUCE NOTIFICATION FEES.

THE medical profession, to an extent probably in excess of any other, performs voluntary work for the public good, and from time to time the profession receives in return from that section of the public, for which in large part it labours gratuitously, indications of the want of appreciation in which its professional services are held. Whether there is any relation of cause and effect between this gratuitous labour and this want of proper appreciation is a question we cannot now stay to discuss, but we wish to draw attention to the recently expressed views of certain district councillors in reference to notification fees. The rural district council of Halesowen have had, they tell us, under their very serious consideration the large amounts paid by them to medical practitioners for notification under the Infectious Diseases (Notification) Act, 1889. As a result of their deliberations they are of opinion that a smaller fee than 2*s.* 6*d.* would sufficiently remunerate the practitioners who are not medical officers of any public body or institution for their trouble, and they also think that there is need for only one uniform fee for notification. In few words, the Halesowen district councillors consider the sum of 1*s.* an adequate recompense to any medical man for notifying a case of infectious disease to the local sanitary authority, and they are apparently endeavouring to convert other sanitary authorities to their way of thinking, in the hope of inducing the Local Government Board to take measures for bringing a Bill before Parliament to amend the Notification Act in the sense referred to.

[1] THE LANCET, May 9th, 1896.

We imagine, however, that the Local Government Board have far too great an appreciation of the value of the notification of infectious diseases and of the services rendered by medical men to the State in this respect to risk the breaking up of the system of notification by encountering the hostility of the whole profession, and we may further assure the councillors that the medical profession will if necessary take steps to prevent any further reduction in notification fees. If the rural councillors who propose the alteration have no idea of the amount of money which has to be expended on the education of a medical man before he can properly diagnose cases of infectious disease, and of the responsibility and strained relationships which notification often entails, we are sorry for the rural district over which these rural councillors preside.

THE EPILEPTIC COLONY AT CHALFONT: LAYING THE FOUNDATION-STONE OF A HOME FOR WOMEN.

ON Tuesday last, May 26th, the foundation-stone of a Home for Women was laid with full Masonic honours by Lord Addington, Provincial Grand Master of Buckinghamshire, assisted by the Provincial Grand Officers. About 200 visitors journeyed from London and drove through very picturesque country from Chorley Wood Station. About eighty Freemasons were present, including many medical men, and their Masonic garb added picturesqueness to the interesting ceremony. Among others present were Mr. Passmore Edwards, Archdeacon Sinclair, Dr. Buzzard, Dr. Ferrier, Dr. Shuttleworth, Dr. Fletcher Beach, Dr. Aldren Turner, Dr. Colman, Dr. Morton, Dr. James Taylor, Dr. Page May, and Mr. George Cowell. At the close of the ceremony an interesting and eloquent account of the aims and intentions of the National Society for the Employment of Epileptics was given by Mr. Micholls, chairman of the Executive Committee. It appears that there are at present thirty-six male colonists, who carry on chiefly market gardening, carpentering, and shoemaking. The remarkable generosity of Mr. Passmore Edwards (who erected the first permanent home for men) has again been shown in his undertaking the cost of this new Women's Home, which will accommodate twenty female colonists whom it is proposed to employ mainly in the laundry, at needlework, and in the dairy. We understand that Mr. Edwards also intends to add a Home for Epileptic Children. The remarkable progress made by the colony in less than two years from its inception indicates clearly how great a need there must have been for such an establishment and that there is a great future in store for it, for it not only gives shelter and protection to a class of sufferers whose lot is often miserable in the extreme, but, by providing them with useful productive occupation under favourable circumstances, prevents, or at least retards, the dulling of the faculties, which is frequently the saddest accompaniment of the disease. Those who were present in the autumn of 1894, a few months after the colony was opened, could not fail to have been struck with the difference in the expression of the faces. Almost all showed to the skilled observer indications of their terrible malady, but there was an alertness and a look of independence about many of them which was wanting before, whilst their appearance suggested that physically they were in better health than many of the visitors. We were informed that there has been no case of serious illness among the colonists apart from the immediate results of their fits, a striking tribute to the healthiness of the site selected by the committee. It was stated by Dr. Buzzard that the medical staff were fully satisfied with the beneficial effect that residence at the colony had had on the epileptic attacks. The work, however, cannot be carried on without considerable expenditure. The labour of the colonists requires much supervision from non-epileptic skilled workmen, and supervision is also required for protecting the colonists when attacked by fits and for maintaining order and discipline. It is certain that the erection of the new Home for Women in the neighbourhood of the men's home will necessitate increased watchfulness and probably a larger staff, proportionally, than is at present adequate. Dr. Buzzard mentioned the necessity of providing also for a resident medical officer—a need recognised by the Committee in their last report, and he strongly appealed for funds to enable a suitable residence to be erected. No one who has had practical experience of institutions of this kind will question the urgency of this proposal, which becomes doubly necessary now that the committee have decided to admit women as well as men to the same colony. Lord Addington, in responding to a vote of thanks, intimated his intention of specially helping towards the establishment of a residence for a medical officer, and when next we have occasion to refer to the colony it is to be hoped that others will also have lent a hand and that this most necessary addition may have been made. Subscriptions are urgently required both for further equipment and for current expenses and should be sent to the secretary, Mr. Gaskell, National Society for the Employment of Epileptics, 12, Buckingham-street, Strand.

IMPLYING REGISTRATION.

WE have submitted the recent decisions in the cases of Reg. *v.* Frickhart and Reg. *v.* Bridgewater for his opinion to a legal friend well acquainted with our own profession. He writes as follows:—In these two cases the courts have held that the mere use of an unregistered foreign diploma in connexion with medical practice does not constitute such a "wilful and false" pretending to be registered as to bring the user within the fortieth section of the Medical Act of 1858. The case of Reg. *v.* Bridgewater (heard by a Divisional Court on the 19th inst.) does not present any special features beyond the fact that Mr. Bridgewater used, in addition to the letters M.D., the explanatory letters U.S.A. That the law upon this point is not in a perfectly satisfactory position may be taken to be proved by the observation of Mr. Justice Collins who remarked in deciding this case that the law was "in a fog." The difficulty is that of determining what amounts to a representation that the practitioner is registered. When the statement made is absolutely false or fraudulently misleading the Courts will convict, but when the statement actually made is true, and the only thing that misleads is the very natural inference that a medical qualification actually held is registered, the Courts have manifested great reluctance to press the law against individuals. This feeling is a very natural one and one of which account should be taken by those who are responsible for putting the law in motion. There is a tendency both within the medical profession and outside it to look upon the offence of falsely pretending to the possession of medical qualifications as an encroachment upon the privileges of qualified men, and this, although it is true enough, is not a very instructive view of the position. The status of a registered medical practitioner is, in a sense, a privileged one, but the privilege is not conferred for the benefit of the privileged class, but for the benefit of the general public. If ignorant or unskilful persons are permitted to practise on the public the public must suffer, and it is for the protection of the public against this form of suffering that the Register is published and protected by penalties against falsification. It is, therefore, a very inadequate view of the statute to look upon it merely as the charter of the medical profession. It is this only because it is much more; the protection of the public is its end and the protection of the profession a means

to that end. This line of reflection suggests the expediency of shaping charges of the kind referred to as far as possible in such a way as to bring into strong relief the public mischief which results from any relaxation of the rules regarding registration or the placing of any obstacle in the way of a thorough and efficient working out of the registration scheme. It is, no doubt, possible to show by argument that in this matter the interests of the medical profession and the interests of the public are indistinguishable and that what injures the one injures the other. Hence the wisdom, at any rate until the law has emerged by successive decisions out of the "fog" and taken shape in clearly defined rules, of submitting to the courts only such instances of encroachment upon the sphere of medical practice as affect in a way too plain for discussion the public interests which it is the object of Medical Acts to protect.

THE HEATH SCHOLARSHIP.

BY the will of the late George Yeoman Heath, Professor of Surgery in the University of Durham and President of the Durham College of Medicine, a sum of £200 is awarded every second year for a surgical essay. The trustees of the scholarship have announced that the second award will be given to the writer of the best essay on "Congenital Deformities, their Pathology and Treatment." All graduates in medicine or in surgery of the University of Durham are eligible to compete for this scholarship, and the essay which must be type-written or printed, should be delivered to the trustees not later than March 31st, 1898. The essay, together with any specimens, drawings, casts, microscopical preparations, or other means of illustration accompanying it, will become the property of the College, though by permission, the essay may be printed for general circulation by the Heath scholar. This is one of the most valuable surgical prizes in the kingdom, and the competition should be keen.

THE ROYAL INFIRMARY OF NEWCASTLE.

THE prominence and activity of Dr. Philipson in Newcastle and its school of medicine—a part of the University of Durham—give exceptional interest to the fact of his resignation on the score of age. The rule of the infirmary requires resignation at sixty years of age—a time of life when a physician is now often at his best, with the advantages alike of youth and age. The post held for twenty-eight years so honourably by Dr. Philipson is naturally one of the prizes coveted by aspirants to professional fame in the city of Newcastle, which has long been noted for men of strength in the profession. The committee have the responsibility of the succession. They will have no excuse for not making a fit appointment. It is understood that Dr. George Redmayne Murray and Dr. Thomas Beattie are candidates for the post. The election will be watched with more than local interest.

PAIN IN CASES OF TUMOUR OF THE SPINAL CORD.

PAIN has generally been looked upon as one of the most constant symptoms accompanying tumours of the spinal cord. In the March number of the *Journal of Nervous and Mental Diseases* Dr. Pearce Bailey reports two cases which were remarkable by reason of the absence of pain which characterised their progress, and while they do not permit any general rule to be formulated with reference to this point they are interesting as a valuable contribution to the symptomatology of an important class of cases. The first was that of a woman sixty-five years of age who died from nephritis and pneumonia and in whom a tumour was discovered involving the dorsal region of the cord between the seventh and eighth roots. This tumour had given rise to no symptoms, either motor or sensory, and was, indeed, accidentally discovered in the course of a systematic examination. Its character was that of a psammoma. The second case was also that of a female patient, twenty-nine years of age. She had had between 1889 and 1893 several operations for "tumour," but the nature and situation of these could not be discovered. Ever since 1889 she had been troubled with recurring attacks of paralysis and numbness affecting all four extremities. She made a good recovery from several of these, but she was readmitted to the hospital in 1895 with the history of the sudden onset of the state of paralysis in which she was when admitted. There was in all four extremities extensor paralysis with flexor contracture—a condition, indeed, suggesting peripheral neuritis; but the knee-jerks were active, and there were cystitis and incontinence of urine. She denied ever having been subject to severe pains. The patient died with lung symptoms and suppression of urine, and at the necropsy a large quadrilateral mass was found on the ventral surface of the dura mater in the cervical region, involving the first four cervical roots. The dura mater itself was only slightly thickened. The tumour was apparently a degenerated gumma, and there were considerable changes in the neighbouring vessels and ascending and descending degenerations in the cord itself. The writer refers, in conclusion, to a case reported in *Brain* by Dr. Michell Clarke, also of spinal tumour without pain, and he is of opinion that the presence or absence of pain, and also the degree of its intensity, may have some relation to the slowness or rapidity of growth of the tumour.

"RETURN" CASES OF SCARLET FEVER.

THIS interesting subject seems at irregular intervals to attract the attention of the public and to call for some comments in our columns; but we are glad to see that the lay press is now approaching the matter in a fair spirit of inquiry and that the occurrence of so-called "return" cases is not at once followed by indiscriminate charges of neglect against the hospital authorities. The most recent group of cases which are explicable on a thesis of infection being conveyed by discharged patients from a fever hospital is reported from Richmond, and there certainly appears to have been a very remarkable chronological sequence in some of the cases. A patient, after eleven weeks' isolation in hospital, was discharged presumably free from infection, but five days later a sister was attacked by the same disease and three days after this—i.e., eight days after the first patient's discharge—three other children were attacked. All these patients were isolated for eleven weeks, but within a week of their return home the mother of the family was attacked. It is very strange that this series of cases should occur in the same family, and it would certainly appear probable that some of them were connected with the return of patients from the hospital. We are not in possession of all the facts necessary to form a judgment on the merits of this little outbreak, but if the laundryman in whose house the cases occurred, and who has doubtless suffered much hardship in connexion with the outbreak, considers, as apparently he does, that he has cause of complaint against the hospital authorities, it will perhaps be better that inquiry should be made as to whether all practicable precautions are taken at the hospital in question, and whether proper disinfection of the house was performed after the removal of each case or group of cases—in other words, that the question should be investigated from both sides. It would seem improbable that the whole series of cases is to be explained by carelessness on the part of the hospital authorities, as after the occurrence of the first "return" case the authorities would have been especially careful as to disinfection, &c. It is interesting in connexion

with this outbreak to reflect as to what would have been the position of the laundryman had none of the cases been isolated. In the first instance, it might have been necessary to suspend business operations during the presence of a case or cases of infectious disease on the premises, and having regard to the fact that apparently the majority of the cases, and certainly the mother, were exposed to the disease on more than one occasion, it does not seem probable that had there been no hospital isolation all the family would have taken the disease almost simultaneously. While therefore we sympathise in every way with the laundryman, it appears to us that his position might have been much worse had there been no isolation hospital in existence. One of the main objects of isolation hospitals is to enable the business of an establishment to be carried on after the removal of a case of infectious disease to hospital and the completion of disinfection of the premises.

THE GENERAL MEDICAL COUNCIL

AT the forthcoming meeting of the General Medical Council Mr. Pridgin Teale intends to bring forward the following motion: "That the present system of accumulated examinations and the enormous increase in the number of rejections resulting from it are not only unjust to the student but damaging to medical education; therefore, that the time has arrived when the General Medical Council should consider: (*a*) how far examinations and the occasions of rejections can be reduced in number, and (*b*) how far, whilst maintaining effective examinations in those subjects which it is essential that every medical man should 'know' and 'retain the knowledge of,' it is possible to withdraw from the sphere of public examination several other subjects which it is desirable that every medical man should 'know about,' but with the details of which he need not permanently burden his mind, the 'bird's-eye-survey' of such subjects being ensured by compulsory short courses of lectures with class examinations certified by the teacher."

THE LIVERPOOL LADIES' CHARITY AND LYING-IN HOSPITAL.

THE angry controversy which has been raging between the board of management of this charity and the late medical staff can if persisted in only end in the complete extinction of the institution. The medical profession in Liverpool is unanimous in its condemnation of the harsh and unjust treatment meted out to the late staff by the board. The attitude of the board towards the staff has not only been offensive but totally unworthy of a body posing as competent to manage the affairs of a public charity. If strong language has been used in the local press by the friends and sympathisers of the late staff, it is, under the circumstances, justifiable. When such epithets as "brutal," "inhuman," and other like phrases have been freely applied to members of our profession for not lending themselves to the views of these gentlemen small blame attaches to the friends of the late staff for hitting out from the shoulder. The board of management consists nominally of ten members, but practically of only four or five. All the letters received by the medical staff purporting to come from the board of management are alleged to have been written by the president and in some instances to have come from him alone and not from the board. The other governing body is the committee of ladies, who are mostly the wives of the members of the board of management; the form of confidence reposed by them in the late staff is instanced by their appreciation of charges of neglect of duty occasionally preferred by the staff against the midwives of the charity; these charges resulted usually in judgment being given in favour of the midwife, in direct opposition to the report of the medical officer who may have made the accusation. A climax of feminine interference was reached by the expression of opinions "on the pattern of an instrument selected by the staff and criticising their professional actions." We are strongly of opinion that, as the medical staff have resigned, the president and one or two other members of the board who have associated themselves with his course of action should also resign. A meeting of the subscribers to the charity should then be held, when means could surely be found whereby the government of the charity could be reconstituted on a satisfactory and proper basis.

NEWSPAPER THERAPEUTICS IN AUSTRALIA.

WE regret to see in the *Argus* columns of letters by Dr. Gresswell, Mr. Moloney, Mr. Duncan Turner, Dr. Louis Henry, and other well-known Australian physicians discussing the use of the cold bath in typhoid fever. Dr. Gresswell treats his audience, which is the public, to arguments based on albuminous infiltration and fatty degeneration. Surely it is most unseemly that such practitioners should set the bad example of discussing important questions in therapeutics in the newspapers. We shall not pursue this note of censure further than to remind them that they are, no doubt thoughtlessly, violating the best traditions of the profession.

POST-MORTEM INSTRUMENTS IN PUBLIC MORTUARIES.

THE St. James's (Piccadilly) Vestry have passed unanimously the following recommendation of their Public Health Committee:—"That the necessary instruments for complete post-mortem examination be provided for use in the mortuary, Dufours-place, by the vestry, the same being required in the interest of progress, apart from the tribute to the medical profession, the committee believing that it is desirable to expedite and perfect any measures bearing upon the spread of science as affecting the public weal, the detection of crime, &c. The instruments used for this purpose are cumbrous and are not, as a rule, possessed in their completeness by medical men, who are only on rare occasions called upon to assist the authorities in medico-legal investigations." We hope that the other vestries which have not yet supplied these essentials for post-mortem examinations will follow this enlightened example.

PERSISTENT RECALCITRANCY.

THE maintenance towards a matter of any attitude which has been shown by repeated experience to be wrong is, to say the least, sheer folly. When the matter is one which seriously affects the health of the community such action becomes almost criminal. Such, we take it, is the attitude of boards of guardians towards the Vaccination Act, which leads them persistently to refuse to accept the dictum of the facts which are ever coming before them in the shape of data from one and another centre of small-pox activity to show that the one unique specific against the inception of the disease in a fatal form, and oftentimes, as proved by comparative data, against attack in any form, is vaccination in infancy, and, better still, this operation supplemented by revaccination in later years. The plain facts, as shown by recent data from Gloucester and other places, were laid before the Hackney board of guardians by one of their number early this month, and much discussion followed the motion to rescind a resolution passed in 1889 to withhold action under the Vaccination Acts pending the sitting of the Royal Commission on Vaccination. The old points of resort to compulsion and interference with the liberty of the subject were among those brought up against the motion, the fact being ignored

that education has now to be enforced, and is in its way eminently an interference with liberty of conscience. The law of vaccination is by no means an isolated example of the requirement of enforcement of a beneficent measure to ensure its general success. With nearly 30,000 unvaccinated children in the union of Hackney the postponement of action in relation to defaulters may at any moment find the district visited by small-pox. When the inaction of a public body in opposition to the law of the land endangers the health of the community it seems high time that body was relieved of the power of inaction and the duty unfulfilled handed over to those who will faithfully carry it out. The anomaly of a sanitary body doing its best to stamp out disease which the recalcitrancy of another local body has fostered is one that should cease. And in this connexion the State has a duty which needs to be acted upon. When State and local authorities are alike inactive the anti-vaccinationist flourishes and the seeds of future epidemics of small-pox are sown broadcast. Perhaps the Vaccination Commission may report some day and tend to hasten the coming in of better things all round.

SANITARY AUTHORITIES AND THE VACCINATION ACTS.

THE desire on the part of sanitary bodies to have in their hands the administration of the Vaccination Acts seems to be growing. We notice that it is now stated that the Lewisham district board of works are about to apply to the Court of Queen's Bench for a writ of mandamus to compel the Lewisham board of guardians to enforce the Acts. This, we take it, is but another way of expressing the view that the duty would be better entrusted to the board of works themselves. We trust that in many more quarters there may rise up the demand on the part of health bodies for the better administration of the Acts now that we may be exposed next winter to a general small-pox epidemic. It is a distinctly healthy sign that our local sanitary guardians are growing keenly alive to the absurdity of themselves using every effort for the extinction of small-pox, and spending the ratepayers' money on isolation hospitals and the like, while the Poor-law guardians are quietly sitting by and allowing people to disregard the law, with resulting suffering, death, and expense.

ACTION FOR MALPRAXIS AGAINST AN UNREGISTERED "DENTIST."

AN action (to which allusion was made last week in our Birmingham correspondent's letter) has recently been tried at the Birmingham county court in which a labourer sought to recover damages for unskilful treatment from a druggist who was not a registered dentist. The facts of the case are briefly these. The plaintiff in June of last year went to a branch establishment belonging to the defendant to have a tooth extracted. He was seen by an assistant, whose name, also, does not appear on the Dentists' Register, and who made a fruitless endeavour to remove the tooth, and then suggested that the plaintiff should go to a proper dentist to get the remaining portion of the stump extracted. As far as can be gathered from the report the face and neck were swollen at the time of the operation. On the following day a medical man was called in and he stated that the bone had been splintered by the attempt to remove the tooth. After being five weeks under the care of the medical man the plaintiff went to Queen's Hospital, where some necrosed bone was removed, the patient not being able to resume his work until April 15th of this year. For the defence a dentist was called, who stated that he had known the assistant for four or five years and considered him a competent operator. In reviewing the facts of the case it would be difficult to say whether the necrosis was the result of the operation or the condition calling for extraction of the tooth, and, still further, it would be difficult to say whether the operation was performed skilfully or unskilfully. The point, however, which must not be overlooked is that there was no evidence beyond that of the dentist called for the defence that the assistant in question possessed the necessary skill. He was not registered, and admitted in his evidence that he had not been apprenticed to a dentist, so that we may certainly question whether he possessed the requisite knowledge. The case is one of those which help to point out the fact that better legislation is required to guard the public against unqualified practitioners whose knowledge is generally but slight and whose skill can usually be gauged at about the same standard.

FEVER AT MIDDLESBROUGH.

THE experience of Middlesbrough in the matter of fatal fever during the last twelve months has not been a happy one, judging by the successive returns of the Registrar-General issued in that period. Up to the close of last year the deaths from fever showed increasing prevalence, and the months that have since elapsed demonstrate a further increase, the first three months of the present year having seen a score of deaths from fever in the borough. In the face of these facts the action of the town council at its first meeting in the current year attains a special significance. The question of the transmission of the annual reports of the medical officer of health to the Local Government Board was raised, and it was asserted that such transmission would probably end in the council having to carry out the recommendations of its health adviser. The council had some time ago even gone so far as to refuse to accept repayment of a portion of the health officer's salary in order to avoid the need of sending up to the Whitehall authorities the annual productions of the medical officer. The requirements of death registration are, however, inexorable, and the facts which they bring to light in the case of Middlesbrough are the more likely to appeal to headquarters by reason of the wilful withholding of local reports. "Where ignorance is bliss 'tis folly to be wise" is not, we trust, likely to be the maxim of the central authority, and many a searching inquiry of a helpful nature has been set going by circumstances far less provocative of State intervention.

ACCIDENTS AND INEXPERIENCE.

THE very sad boating disaster which cost the lives of three persons last Saturday on Lake Windermere cannot fail to excite in every mind the keenest regret. It is further noteworthy as being typical of a class of accidents which is absolutely inseparable from almost any form of athletic recreation so long as obedience to the calls of caution and experience is not accepted as the governing principle. Whether it be the management of a sailing boat—and much more if this be a racing cutter—the climbing of a peak, a long swim, a ride on a horse or a bicycle, a row on the river, or a physical effort whatsoever or wheresoever, requiring skill in him who makes it, this rule holds. The novice must be content with learning; if he is not, no authority or act of law which does not also forbid his exertions can save him from getting into trouble. We do not ignore the duty of warning which belongs to professional instructors. The Alpine guide, the boat owner, and a hundred other experts must share this responsibility, but still another factor is required for the safe attainment of success—one who will listen to advice. We trust that a reasonable caution will still be in time for any who shall seek healthy recreation in various forms of sport this summer. At the inquest, which was held on May 25th, the jury, after returning a verdict of "Accidental death," recommended the local authority to prohibit the letting of

yachts unaccompanied by a boatman accustomed to the lake under penalty of forfeiture of the licence, and also an official inspection of yachts let out for hire in order to make sure that they were fitted with efficient water-tight compartments.

MEDICAL CERTIFICATES AND BOARD SCHOOLS.

THE example of the London School Board has infected one of its near neighbours. Alfred Barnes, of Church-street, West Ham, was summoned before Mr. Baggallay because his child did not attend school. He handed in a duly signed medical certificate stating that the child was unfit to attend school. The School Board authorities of West Ham refused to accept this as the nature of the disease was not stated. More than this, the School Board officer advised Mr. Barnes to change his medical man. Now, apart from the rudeness of the Board in refusing to accept a document which it has no right to demand, we contend that, in addition, it has no right to know what is the matter with any child. That is a confidential matter between the medical man and the patient or the patient's guardians, and we consider Mr. R. Brinsley Hunt, the medical attendant, was perfectly right in refusing to state on the certificate the nature of the disease. We do not expect courtesy or anything else except a constantly increasing rate from a School Board, but we do from a magistrate. Mr. Baggallay is reported as saying that "Dr. Hunt was very foolish and the School Board officer very wise. In respect to the remark of the officer to Mr. Barnes, if he (Mr. Baggallay) had been the School Board officer he would have said the same thing," which we can well believe after reading the rest of Mr. Baggallay's dicta. The summons was withdrawn, and thus another School Board has "incurred the odium of unsuccessful legal proceedings." Mr. Hunt is to be congratulated, and we hope his example will be studiously followed.

EASTBOURNE AND THE VACCINATION ACTS.

AT length, after some years of neglect of duty, the Eastbourne board of guardians have resolved to put the Vaccination Acts into force. This decision was reached at the meeting of the board on the 22nd inst., after a division upon a motion brought forward by Miss Brodie Hall and seconded by the Rev. E. E. Crake. Miss Brodie Hall referred to the "terrible object lesson" with which Gloucester had furnished them and pointed out that small-pox might invade any town, however well equipped in other respects, if the inhabitants were deprived of the protection afforded by vaccination. Mr. Crake protested against the indifference to this crucial question hitherto displayed by the board, and especially referred to the serious danger to the schools and colleges of Eastbourne which would be caused by an outbreak of small-pox in the town. It came out in the discussion that the vaccination officers had received instructions to enforce the Acts in accordance with a resolution passed on May 25th, 1893; but why these instructions had not been carried out did not transpire. One speaker (Mr. Luck) averred that the reason for the delay in the issue of the report of the Royal Commission was "because the evidence was dead against the vaccinationists." Dr. Adams said that "if they were to take six vaccinated children of six months old and six children of the same age who had not been vaccinated, the anti-vaccinationists would not dare to expose the unvaccinated to the infection of small-pox." Referring to remarks by Mr. Luck, Dr. Adams said that the medical profession was in favour of vaccination because they knew it was the best protection from small-pox that they could give to their children. The resolution to enforce the Acts was carried by thirteen to eight. The attitude hitherto assumed by Eastbourne on this question has always seemed to us a remarkable thing; for if small-pox were to invade the town and spread amongst the unvaccinated children, as it has done at Gloucester (where the proportion of the unvaccinated was no higher than at Eastbourne), this charming seaside resort would receive a blow to its prosperity from which it would take years to recover.

FORMATION AND STRUCTURE OF THE OPTIC NERVE.

IN an article contained in the April number of the *Journal of Anatomy and Physiology* Dr. Arthur Robinson of Owens College gives an interesting account of the formation and structure of the optic nerve derived from his researches on the embryos of man, the rat, cat, ferret, sheep, and rabbit. He accepts the view that the fibres of the optic nerve do not, as some have thought, arise from the epithelial cells which constitute the primary outgrowth from the brain, but holds that they spring chiefly from the cells of the retina which shoot up towards the brain but in part from the brain growing down to the retina. The optic stalk itself is composed essentially of protoplasmic substance which develops into retiform sustentacular tissue and becomes converted into the optic nerve by the passage of nerve fibres through its walls, the fibres being protected and supported by the external limiting membrane of the stalk. The specimens examined by Dr. Robinson showed that at their first appearance the nerve fibres are found in the stalk only in its retinal portion, and even in the later stages they are most abundant near the retina. When the invasion of the stalk by the nerve fibres first occurs they are limited to the ventral wall, and it is only when the canal of the stalk undergoes obliteration that the fibres are found in the dorsal wall of this process. He draws the conclusion from his researches that the retina is a portion of the brain wall specially situated and modified to the proper performance of its function; and inasmuch as it is an outgrowth of the ventral part of the lateral wall of the thalamencephalon the retina may be looked upon as a modified basal ganglion and the optic nerves are association bundles bringing it into relationship with other parts of the brain.

THE ILLNESS OF SIR J. RUSSELL REYNOLDS.

WE regret to learn on going to press that no improvement has taken place in Sir J. Russell Reynolds's serious condition.

A NURSING EXHIBITION will be opened at 2.30 P.M. on Monday, June 1st, in St. Martin's Town-hall, Charing Cross. The exhibition will remain open till Saturday, June 13th, during which period, in addition to the exhibits relating to the care of the sick and injured, there will be various attractions for visitors in the way of music, Roentgen ray demonstrations, &c.

THE Colonial Office is informed by telegram from the Governor of Hong-Kong that 76 fresh cases of bubonic plague occurred in the colony in the week ending May 26th, and that the number of deaths from the plague in the same period was 68.

THE Metropolitan Counties Branch of the British Medical Association will hold a conversazione in the Natural History Museum, South Kensington, on Thursday evening, June 18th.

THE new buildings of the Croydon Borough Hospital, Waddon, will be opened on Saturday, June 6th.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER XXI.

The Adjourned First Meeting of the Members.—Its Action.—A Metrical Squib.—The Refutation by the College of the Charges brought against it.

THE Members of the Royal College of Surgeons of England re-assembled on March 4th, 1826, when Mr. William Lawrence again took the chair.

The business of the meeting was to receive a report from the committee which had been appointed at the previous meeting to prepare the petition to the House of Commons. Mr. Tyrrell, the chairman of that committee, said that, although they had received no instructions to that effect from the Members, they had approached the Council of the College asking them to join in the application to Parliament. These gentlemen having contemptuously refused, he proposed that the opinion of counsel should be taken as to the best mode of applying to the Legislature.

Wakley again made a forcible speech, in which he pleaded for action, the necessity for drastic reform being urgent. He read a long amendment to Mr. Tyrrell's motion, but that gentleman was ready to accept Wakley's suggestions, and with the leave of the meeting, altered his original resolution so that it read as follows:—

"That the committee be at liberty generally to take such steps as they think fit to remedy the abuses now existing in the Royal College of Surgeons; and that they shall call a general meeting of the members whenever they shall think it advisable."

Wakley seconded the resolution, which was carried unanimously. A subscription was then opened to defray the expenses of any step the committee might desire to take.

This, the first general meeting of the College, was to lead to important developments. The various steps that were taken by the reformers and the methods employed by the College authorities to arrest the progress of the movement will all be found chronicled in THE LANCET, and need not be here described more fully. Wakley's share in the movement is quite clear. He summoned the first general meeting by advertisement which he inserted himself. He persuaded Mr. William Lawrence, a member of the staff of THE LANCET as well as a hospital-surgeon, to take the chair at the meeting, knowing that in this way he would arouse the proper spirit of instructed reform and not merely turbulent clamour for nothing in particular. It was Wakley's speaking at the meetings which led to definite steps being taken. Had it not been for his vigorous words of contempt at the passing of mere condemnatory resolutions, the meetings would have been content with effecting that much; but they followed in his lead, and found themselves promptly committed to an appeal to the Government for reddress.

Mr. Abernethy, who was the mouth-piece of the Council in their very natural refusal to join the Members in the agitation for a new charter, was made the subject of several humorous attacks in THE LANCET, otherwise Wakley used his paper impartially. He printed the opinions of the reformers whom he represented, and whom he really led, but he gave equal space to any reply that came from the College. Mr. Abernethy was not put forward for the College because the great surgeon was the most reactionary Tory on the Council. He was nothing of the kind, and often his written or spoken words showed that he sympathised with many of the complaints that were made by the general body of the corporation against the existing management of the College. But Mr. Abernethy was a masterful man and an intellectual aristocrat. He did not approve of any opposition to a system of government for which he was partly responsible, while he belonged to a picked body of surgeons and sincerely believed that persons not so selectly situated possessed a lower order of intelligence and could not, consequently, expect to be entrusted with the conduct of their own affairs. His colleagues chose him as their spokesman because of his great public reputation and pronounced taste for fighting. Popular with the students and the best surgeon at the great hospital of St. Bartholomew he had an enormous public fame for honesty and bluff wit and a great scientific reputation, as the person upon whom the mantle of John Hunter had seemed to fall. The following verses on him from Wakley's pen did not constitute a fair attack as they misinterpret Mr. Abernethy's attitude, but they are worth printing as no mean display of metrical skill. Doggrel they are, but they say what they mean:—

JOHN ABERNETHY, LOQUITUR.

We have decreed that there shall be in England but one station
At which young men shall 'grind to pass' and have our approbation.

With Scotland 'tis a different thing, you all know I am Scotch, sirs,
And for my clan I do not mind to shuffle, cheat, and botch, sirs.

In Scotland then raw lads may find three schools to one elsewhere, sirs,
And those who deem this law unjust may scout if they dare, sirs.

* * * * *

Ye stupid fools and blundering churls, who want our leave to practice,
Behold, I take the pains to tell what our new-fangled act is.

* * * * *

Moreover, 'tis our royal will, our most imperial pleasure,
As well to fill our classes out, as swell our bags with treasure,

That knowledge henceforth be unsound, to reason quite contrary,
Unless obtained sometime about the month of January;

No one shall dare to think or say that any man can truly
Acquire the art of lopping limbs within three months of July.

* * * * *

So fare ye well, confound ye all—may every ill infest ye,
If ye shall dare to make a stir or say we have oppress'd ye.

The verses, which are extracted from a long "poem," are unfair, but it must not be supposed that their injustice to their subject, had the significance of a deliberate libel. No one believed in the accuracy of that sort of attack; the quality of exact truth was not expected. The metrical squib was a survival of eighteenth-century habit. If you were taking a side in a row you wrote verses lampooning your opponent. He replied with a pamphlet. You hit back with an open letter. Possibly a duel ensued. More often someone of the school of Gillray interposed and limned you both ridiculously, the net result being that the audience laughed and the champions laughed.

The occasion of these verses was the presentation by Mr. Abernethy of the refutation by the College of the charges brought against them. This document is appended. It is long, but it is the categorical answer of the governing body to all the charges of gross mismanagement that had been brought against them, and it would be unjust to alter it by a syllable.

"ROYAL COLLEGE OF SURGEONS, IN LONDON.

"*Observations in Refutation of Charges, publicly made by certain Members of the College, against its legally constituted Authorities.*

"It is asserted that the College has not performed those duties for which it was incorporated.

"That this assertion is unfounded, will be acknowledged by all reflecting and unprejudiced persons, who compare the present state of surgery throughout the country, with that, which existed when the College received its charter in 1800; for it appears that the increased respectability of the profession may be principally attributed to the acts and regulations

[1] Chapters I., II., III., IV., V., VI., VII., VIII., IX., X., XI., XII. XIII., XIV., XV., XVI., XVII., XVIII., XIX., and XX. were published in THE LANCET, Jan. 4th, 11th, 18th, and 25th, Feb. 1st, 8th, 15th, 22nd, and 29th, March 7th, 14th, 21st, and 28th, April 4th, 11th, 18th, and 25th, May 2nd, 16th, and 23rd respectively.

of the College. This advancement may be mainly ascribed to the more extended education which has been progressively required of the candidates for its diploma; to the zeal and talents of its professors, in displaying and communicating by public lectures, a scientific knowledge of the subjects connected with the healing art; and to the labour and time devoted to the explanation of the contents of its Museum; by which a strong desire for increase of knowledge has been excited.

"The inquiry into the professional education and attainments of candidates, has been rendered more strict in proportion to the general increase of knowledge.

"During one period of the late war, when the applicants for examination were unexpectedly and unprecedentedly numerous, in consequence of the demands of the public service, many candidates were necessarily examined at the same court; but since the peace, not more candidates have been admitted to examination at any court, than could be examined in an ample and satisfactory manner; and for some time past, each candidate for the diploma, has been separately examined in the presence and hearing of the whole court; which is now the established practice.

"The examiners have so frequently referred candidates to a continuance of their studies, as to induce students in general to think seriously of their examination, and to prepare themselves for it, by a proportionate degree of diligence.

"Had inquiry been made, it would have appeared, that the examiners have not any pecuniary interest in the admission of candidates as members; and it cannot be improper to mention, that the remuneration received by the examiners is a very inadequate recompense for the time and labour bestowed upon the execution of their arduous and important duties.

"There is no profession into which dishonest and dishonourable persons have not at times gained admission; but the council are not aware of a single instance of an empiric having been admitted as a member; and not until lately, has it been understood, that the College possesses the power of removing any member who has been guilty of disgraceful conduct.

"It has been made a subject of complaint, that certificates of summer courses of lectures are not received by the court of examiners. That certificates are not indiscriminately received from every anatomical teacher, and that certificates of attendance on provincial hospitals are not admitted by the court; and such regulations have been censured as unjust bye-laws of the College.

"The council have in the first instance, to correct this error. There are no bye-laws on these subjects; these are regulations of the court of examiners. The council have been assured by the court of examiners, that so many certificates of attendance on lectures had been presented to them, purporting to be signed by teachers wholly unknown to them, as to render it imperative to define the certificates which in their judgment, it would be proper with a view to the public good, and respectability of the profession, to acknowledge and to receive.

"The council believe, that not any persons except the court of examiners are able to judge correctly on this subject; and while they wish to correct the erroneous supposition of the regulations in question being bye-laws of the College, they cannot but give credit to the court of examiners for the most pure and conscientious motives; and for an earnest desire to promote the dignity of the profession; and necessarily the welfare of the community; in the legitimate exercise of their discretion on these subjects.

"The court of examiners, anxious that students should attend instructions capable of giving them enlarged and scientific views of their profession, knew not how they could obtain from distant places, any evidence of the teacher having, himself, received a liberal professional education, but by the means which they have adopted; yet, notwithstanding such regulations, it cannot be doubted that any member of the College, possessing in an eminent degree the requisite qualifications for becoming a teacher of anatomy, physiology, and pathology; which are united in the recognized schools; would so distinguish himself, as to justify the admission of his certificates. The regulations of the College must always change with the circumstances of the times.

"The subject of attendance on provincial hospitals, had repeatedly engaged the consideration of the court of examiners; but with every respect for, and the highest opinion of, the medical officers belonging to most of these excellent establishments, the council would witness with regret the indiscriminate admission of such certificates.

"The court of examiners, have under certain conditions, recognized attendance on the practice of some of those hospitals; and the council are of opinion, that it would injure the cause of chirurgical science, where the court of examiners to be controlled in the exercise of their discretion on this subject.

"In reference to the complaint of the Museum not being more freely and frequently opened to the public, and of the want of a catalogue; answers to such accusations are contained in the triennial reports from the Board of Curators to the council, in the last of which is the following summary of proceedings, with respect to the catalogue.

"'The following recital of facts will show the council how solicitous the curators have always been that the collection should be properly explained.

'When the Hunterian Collection was received by this College, it was accompanied by two catalogues; one, explanatory of the preparations in the gallery; the other, of the morbid preparations. These had been compiled by Mr. C. Clift, under the direction of Sir Everard Home, from old catalogues, formed under the superintendance of Mr. Hunter; as is proved by his hand-writing in many parts of them. The transcript must have appeared to the curators, and must be allowed, by every one, to contain a very excellent and perfect account of Mr. Hunter's views and opinions in the formation of his collection; though it must also appear very deficient in the explanation of the individual preparations.

'No one, however, supposed, until within a short time, that Mr. Hunter left any other writings of importance explanatory of his Collection, than the before mentioned two catalogues.

'On the completion of the Museum, and the admission of visitors, the want of a descriptive catalogue was soon felt and expressed; and the Board of Curators, in the year 1813, prepared a printed syllabus to gratify scientific inquirers.

'The Curators also consulted Dr. Shaw, who, at the instance of the Board, prepared a third catalogue of objects in the department of natural history.

'A descriptive catalogue of the preparations, which was earnestly desired by the Trustees, has ever been a desideratum of great interest and consideration to the Board of Curators, as may be seen by its minutes.

'The Board regarded Sir Everard Home, as executor of Mr. Hunter, to be the person most proper, and best qualified to undertake the task of preparing the catalogue, which he repeatedly engaged to do.

'At length, in 1816, it was proposed, that all the Curators should become joint labourers in this great work, when Sir Everard Home declared, that it was his special duty, and that he would admit of no participation in its performance. The result of his labours was the production of a synopsis, which, doubtless, the members of the Council have perused.

'When in 1817 Sir Everard Home became a Trustee, he resigned the office of Curator; and the Board, anxious for the completion of a descriptive catalogue of the contents of the Museum, resolved to engage the Conservator in preparing one under their own superintendance.

'In order to allow him more time for this undertaking, the Board appointed his son to be assistant in his ordinary duties. They directed that the specimens of monstrosity should be removed from the closet in which they were arranged, that it might be appropriated, during the necessary time, to the receipt of books, papers, and other things subservient to the preparation of the catalogue.

'The Board decided, that the contents of the galleries should be arranged in two divisions, each containing subdivisions, which sub-divisions should also contain series and sub-series.

'The Board further appointed Sir William Blizard, Mr. Cline, and Mr. Abernethy, to be a sub-committee for the special purpose of superintending the formation of the catalogue; to report to the Board from time to time the progress made in it, with such observations relating thereto, as they should consider proper; which sub-committee has presented to the Board the description of the first subdivision of the gallery, comprehending seventeen series, containing 261 preparations, which was approved by the Board, and also by the Trustees.

'When, however, the Conservator began his task of preparing the catalogue, he expressed the wish to obtain some of Mr. Hunter's manuscripts, and thus did the Board of Curators learn for the first time the extent and nature of the

manuscripts left by Mr. Hunter, with relation to his collection.

'The Curators, on applying to Sir Everard Home, were informed by him, that he had burned all Mr. Hunter's manuscripts, in consequence of a promise made to Mr. Hunter to that effect.

'Amongst these manuscripts were ten volumes in folio, viz., nine on the anatomy of animals, and one on vegetables. That Mr. Hunter considered these books to be valuable, and not otherwise than creditable to himself, may be inferred by three of them being placed on the table beside him, when his portrait was painted by Sir Joshua Reynolds.

'It is said, that Sir Everard Home has even burned Mr. Hunter's manuscript lectures, which he read to his class. But the Curators cannot believe that Mr. Hunter could intend that these works should be burned as unimportant manuscripts. It must, therefore, always remain a subject of deep regret, that Sir Everard Home should have felt himself bound by his promise to Mr. Hunter, to have carried destruction to the extent to which he is said to have done; yet Sir Everard Home has not felt the same obligation to destroy all the writings on morbid anatomy; for the Curators have obtained, through the interposition of the Trustees, two folio volumes, and two solanders of cases and dissections explanatory of a considerable number of the morbid preparations.

'These books contain a careful record of the symptoms and effects of disease during life, and the alterations of structure produced, as ascertained by examination after death. They are highly creditable to Mr. Hunter, as expressing that thirst for knowledge, which led him constantly to seek it by means which we know to be the most certain, but also the most tedious, laborious, disgusting, and unostentatious.'

"The want of a catalogue, as explained in that report, is, in the opinion of the Council, a most satisfactory reason why the Museum has not hitherto been more freely opened to the profession, and why it cannot be for some time, admitting the completion of that catalogue, to be of such paramount importance as the Council deem it to be.

"It may be further observed, that the study of comparative anatomy had been formerly so little prosecuted in this country, that, though many persons were consulted, none could aid in giving a description of the individual preparations in the Hunterian Collection. The Conservator has, however, for a considerable time, been engaged in such researches and inquiries, as have enabled him, not only to give an exact account of each preparation, but also to explain Mr. Hunter's intentions in the formation of his Collection; and the more the time of the Conservator shall be occupied in explaining the contents of the Museum to visitors, the longer necessarily must the completion of the catalogue be retarded.

"With respect to the Library, its formation has been the act of the College, and is intended to aid the professional inquiries of its members, for which purpose it will, when in a proper state, be opened.

"It may be added, that of the numerous applications made by members, for permission to refer to publications therein, every one has been most readily complied with; and the same may be observed of applications to examine and to make drawings from preparations in the Museum.

"With regard to the supposed indignity offered to the members at large, by their being admitted to the theatre by a door at the back of the building, the Council, aware that any want of respect to its members would be a failure of respect to the institution itself, did not imagine that umbrage would be taken by such an arrangement; at the same time they regret that the present construction of the building precludes the practicability of an alteration.

"It is proper to observe, that no official complaint or remonstrance on this subject has ever been made to the Council. Some years since, indeed, it was mentioned to the board of curators; upon which the members, during one course of lectures, were admitted to their seats from Lincoln's Inn-Fields, through the Museum; the dust occasioned thereby, was found to be injurious to the collection, in consequence of which, the present arrangement was adopted; certainly with a view to the comfort and convenience of the members, and for the preservation of the preparations. When the theatre was built, the great influx of persons into the profession, which has since taken place could not have been anticipated; and it was then thought that the building would be more than adequate to the accommodation of all who would attend.

"It is represented, that the constitution of the College has been the cause of the alleged injuries and grievances.

"The evident object of this representation, is the subversion of the present government of the College, and the substitution of elections to offices of control and responsibility, by members, who for the most part exercise the professions of apothecaries and accoucheurs. There can be little doubt, that in the event of such an innovation, the Institution would soon cease to be a College of Surgeons or of Surgery, and a system of continual intrigue and cabal amongst the profession in general would be introduced.

"The constituted authorities of the College are conscious that they have uniformly exerted themselves to increase the scientific knowledge and respectability of the profession; and that they have never been influenced by the unworthy motives imputed to them; had any of the members of the College expressed dissatisfaction at their proceedings, they would have willingly explained the reasons of their conduct, as well as their future intentions, and have altered whatever could have been shown to be wrong; but when meetings have been convened to subvert the Charter of the College, 'under the sanction of which," it is said, "injustice and tyranny have been perpetrated"—when, at these meetings, the most dishonourable motives have been attributed to the members of the Council, they feel it due to themselves to offer this brief, and they trust satisfactory, explanation of their conduct.

By order of the Council.
(Signed) EDMUND BELFOUR, Secretary."
"Lincoln's-Inn Fields, 26th day of April, 1826."

THE REPRESENTATION OF MEDICINE AT THE NATIONAL PORTRAIT GALLERY.

OF all the learned professions medicine is the happiest in having no history, or, rather, in not entering the history of political and national strife. The lawyer and the clergyman have time and again been the heroes of one party or other, and artists with brush or pen have won notoriety by a somewhat unholy alliance with the factions of the moment. The medical man has no concern with the inflicting of wounds, corporal or mental; his only task is to heal and prevent them. His enemies are disease and dirt, and victories over the common foe bring no such glory as is won by crushing the particular opponent of the moment. Nevertheless, the National Portrait Gallery contains not a few pictures of the famous physicians of the past, which bring to mind more clearly than before the personality of bygone leaders. Up in the topmost floor hangs the portrait of the coryphæus of the line, Sir William Butts, the physician of Henry VIII., and a very early Member of the Royal College of Physicians of London. The catalogue claims him as one of its founders, but that is hardly accurate, for he was not admitted until a year after its commencement. The humorous and pawky face that the scholar of Holbein painted from his master's original betrays clearly enough the Norfolk ancestry, and makes it possible to understand how he retained the favour of his somewhat irritable patient even though he dared to plead for statesmen out of favour. The portrait is interesting as that of the one physician whom Shakespeare names all through the plays, and he is characteristically pleading for Cranmer and calling the King's attention to the strangest sight:

> "The high promotion of his Grace of Canterbury,
> Who holds his state at doors, 'mongst pursuivants,
> Pages, and footboys."

It would be unfair to think of him as a fly in amber, but it is not unnatural to wonder why he should have been introduced into the play merely to speak three sentences and to hear from his master: "Butts, there's knavery."

The portrait of Harvey is perhaps the most interesting of all, though unfortunately hung so that the light is reflected from the glass and partially dazzles the view of the picture behind whatever efforts be made to find a satisfactory position. There are written very plainly on the face the irritability and nervousness which made his life unhappy and added sting to the neglect or contempt with which his discoveries were received. Aubrey is fully borne out in his description of his contemporary as, "like all the rest of his brothers, very cholerique, and in his younger days apt to draw out his dagger upon every slight occasion." "His

little eie, round, very black, full of spirit," still looks out from the canvas; but the hair, once "black as a raven," is here quite white, though the animation of the general expression has bated not at all. Like his predecessor Butts, he is one of the glories of Caius College, Cambridge, or, as it used to be, Gonville Hall.

Oxford can claim no genuine physician in the gallery, though Hunter was on the books of St. Mary's Hall for ten months. She has to fall back upon a fine painting by Van Dyck of one of the irregular army that hangs upon the wings of the medical forces. Sir Kenelm Digby was a very early experimentalist and of the keenest, but unfortunately he had the "infirmity," as a lady friend of his gently phrased it, of lying magnificently about his work. His famous "powder of sympathy," which "infallibly cured" all green wounds if first applied to the offending weapon, has a certain flavour recalling Count Mattei and coloured electricity, although powdered blue vitriol may, after all, have had some antiseptic and escharotic value. At the same time, he was keenly interested in medicine and a most fervent believer therein. Upon the whole, Oxford has more reason to feel proud of him as sea-captain than as physician, but as Radcliffe does not appear in the gallery the best must be made of Sir Kenelm Digby, and excuses found for his imagination in the huge forehead, which curiously recalls the face of Shakespeare, though wholly lacking in the balance of mouth and chin.

The eighteenth century is much more prolific of great names, though sometimes it may fairly be asked whether the intention of the trustees has been successfully accomplished. Their rule, as Earl Stanhope declared, was to admit "not a single portrait as to which a man of good education passing round would be under the necessity of asking, 'Who is he?'" Even a medical man of good education may be pardoned for a difficulty in recalling the chief facts in the lives of Saunders and Allen, and how much more a layman? Sir Charles Bell, bearer of a name long famous in medicine, whose work on nerves is claimed by many, and also by himself, to rank his name upon the same scroll as Harvey, stands up in most orthodox lecturing position, smiling with the thought that his "Anatomy of Expression" has been sent, by desire, to the Nabob of Arcot, bound in all the glory of red morocco and satin. What use the Nabob made of the work cannot be known, but if it interested him he was not unlikely to test its assertions by vivisection on a large scale without the aid of anæsthetics. No doubt the large red book beneath his hand is a pleasant reminiscence of his world-wide celebrity, but he should have held his Bridgewater Treatise on the Mechanism of the Hand in the other to complete the memorial. Side by side stand the two great London men, Hunter and Edward Jenner. The first portrait is copied by the brush of Jackson from the famous Reynolds in the Royal College of Surgeons of England and is too well-known to need description, especially the local colour delicately insinuated by "an anatomical preparation in a bottle, and the feet and ankles of a human skeleton." This local colour is secured for Jenner by a drawing of a cow encircled by the medical serpent with its tail in its mouth. Northcote was not a Morland at animals, for the beast is like nothing so much as the wretched horses which appear on Bank Holidays and attract the attention of the officers of the Society for the Prevention of Cruelty to Animals. Jenner is supported by his Quaker disciple Dimsdale, who combined the professions of inoculator-in-chief to the Russian Imperial family and Hertfordshire banker. His treatment was not least memorable for the gigantic fee of £12,000 and the pension of £500 which were bestowed by the grateful Czar. His miniature presents a face more than usually attractive, the pink cheeks harmonising well with the prosperity that naturally attaches to the idea of a Quaker banker.

Sir Hans Sloane, the proud possessor of a Dutch name, Scottish ancestry, and Irish birth, completed his cosmopolitan character with a foreign education before he settled in London. His portrait exhibits a man who was obviously successful. As he sits upon the chair of the President of the Royal Society, with the gilt mace supporting him upon the right, his dignity secured by an enormous Louis Quatorze wig, he fully looks the part of the impressive chairman. It must be confessed that his contributions to medical knowledge were not of the most valuable, but as long as the British Museum and London itself exist Sir Hans Sloane need not fear to be forgotten.

Richard Mead, though a Stepney man by birth, was also educated abroad at Leyden and Padua. He has won a right to a place here as fully as to his monument in Westminster Abbey. The portrait of the Court physician, to which office Mead soon attained, was naturally done by the Court painter, Allan Ramsay, and was very successful. Richard Mead himself, whose house, by-the-bye, stood in Great Ormond-street where is now the Hospital for Sick Children, and in whose hall till a few years ago out-patients used to wait, was a most excellent classical scholar and an enthusiastic collector of antiquities. This knowledge he employed in his endeavour to prove from the old medals and authorities that the status of the medical profession in the ancient world was much higher than is generally thought, and that its members were, as a class, wealthy and highly respected. The wealth he proved, but as to the respect paid it is to be feared that the honours of the contest remain with his opponent, the famous Conyers Middleton. There never was a physician in whom friends believed more fully, and one follower declared that he had saved the life of Queen Caroline when all the other medical men were poisoning her with their prescriptions. His neighbour and junior, Parsons, who occupied Red Lion-square, hardly deserves a place in the gallery, but perhaps he has arrived there chiefly because he "was cheerful and decent in his conversation," a character so rare in the eighteenth century that it may be held to excuse his presence. Of the picture all that need be said is that it bears out the reputation.

Curiously enough, the remaining three, who were all contemporaries, are more famous for their literary than for their scientific performances. Erasmus Darwin, John Wolcot (better known as Peter Pindar), and John Allen are the writers of works which are at least more remarkable than their surgical or medical skill. True that more men probably have read the Anti-Jacobin parody, the "Loves of the Triangles," than the original "Loves of the Plants," but we may still claim the latter as the honour of the profession. Darwin, like his greater grandson, was a product of Cambridge scientific training, and though the combination of science and poetry has not, since the days of Lucretius, been generally satisfactory, there can be no question of his right to a place among the prominent men of his day. Wolcot was a man of very different type. First a physician, then an ordained clergyman, and finally a professional satirist, he played many parts, though it was only in the last that he won success. His miniature, painted on ivory by Lethbridge, is more typical a portrait than the larger face, but in both are finely developed the cynical nose and mouth, which betray his mental attitude and explain the terror he inspired into that favourite object of his jibes, the farmer king. He has at least the honour of rendering the story of the monarch's puzzle over the dumplings and the pastry a historic commonplace, and he gives a picture of George III. which, if not exactly fair, is at least lifelike. He spared his professional brethren as little as his king, and not even the dignity of the President of the Royal Society saved Sir Joseph Banks from most unprofessional ridicule. Dr. John Allen, if less brilliant, was at least more attractive. He will be remembered best as the resident physician of Holland House, where he had to endure the caprices of his charming but unmannered hostess Lady Holland, who treated him in public almost as a servant. Everyone remembers the remark quoted in the "Life and Letters of Lord Macaulay": "Mr. Allen, there is not enough turtle to go round; you must have gravy soup or none." His portrait is a very attractive Landseer and presents an ideal Mr. Pickwick, with a bland benevolence that ought to have been sufficient to disarm all impoliteness. His fame as a comparative anatomist has been somewhat dimmed, and it may be that he will be best remembered by his history of "The Rise and Growth of the Royal Prerogative in England," which treated the subject in the most strictly orthodox Whig manner, as was to be expected from such a companionship.

It is harder to discuss the portraits of this century, which time has not yet ranked in order of importance. Amongst these is Guthrie, the daring and brilliant surgeon whose name will always be associated with the Peninsular War. In the Arctic room, again, which always has its group of spectators bearing witness to the curious fascination of the North Pole for the strain of Viking blood within us, is the portrait of Walker, the surgeon of the *Fox* which made the last sad discoveries of the Franklin expedition. Not far from the Watts portrait of Sir Andrew Clark is a fine full-length portrait of Sir Richard Owen, who, in his long life, had seen

greater developments in his profession than any of his predecessors.

One thing at least our profession may claim. Not one of its members hangs there as an awful example. For a chamber of horrors the law has an excellent candidate in Jeffreys and perhaps in Impey, the Church could spare Dodds, and literature might conveniently hang Godwin and Churchill in a rogues' gallery. As for the politicians, there are few who would obtain a unanimous vote of confidence, but the medical men's portraits, even including Peter Pindar's, are of gentlemen.

THE EFFECT OF BORAX ON THE CURDLING OF MILK.

BY F. J. ALLEN, M.A., M.D. CANTAB.,
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ONE of the effects of adding borax to milk is to render it incapable of curdling, but the curdling property is restored on the addition of a small quantity of calcium chloride. I have frequently observed this condition in commercial samples of milk. Having made a number of laboratory experiments for the purpose of ascertaining the quantity of borax necessary to prevent curdling, I find as a result: (1) that milk containing one-tenth of its volume of cold saturated solution of borax is incapable of curdling with rennet (this is equivalent to about 36 grains borax to 1 pint milk)—smaller quantities of borax delay the curdling more or less; (2) that the addition of calcium chloride either before or after the rennet restores the normal curdling power; and (3) that boric acid added to milk does not delay curdling with rennet, but rather hastens it. The effect of boric acid seemed to indicate that the loss of curdling property in presence of borax was not due to the boric portion of the salt, but rather to its soda. I therefore tried the effect of adding sodium bicarbonate to milk. The results were as follows:—1. Curdling with rennet is prevented by adding to the milk one-sixth of its volume of a 5 per cent. solution of sodium bicarbonate. Smaller quantities retard curdling. 2. The addition of calcium chloride restores the curdling property apparently more quickly than in the case when borax has been used. From these experiments it appears that the prevention of curdling may be due to the removal of the lime salts from the field of action, but is more probably due to the formation of a soluble compound of the casein and alkali, which is decomposed by calcium chloride in excess. If borax removes calcium from the field of action it follows that not merely the curdling function will suffer, but also many other functions of the body in which calcium is needed. And even if the alkali of the borax is the only restrainer of curdling it is not desirable to neutralise the gastric juice by its use. Moreover, the presence of borax may prevent the normal production of acids by fermentation and thereby further hinder digestion.

Birmingham.

THE INTERNATIONAL CONGRESS OF DERMATOLOGY.

THE programme of the Third International Congress of Dermatology, to be held in the Examination Hall of the Royal Colleges of Physicians and Surgeons, Victoria Embankment, from Aug. 4th to Aug. 8th, has just been issued, and some interesting discussions are promised.

Mr. Jonathan Hutchinson, the President of the Congress, will be supported by the following Vice-Presidents: Dr. Wilks, President of the Royal College of Physicians of London; Mr. Christopher Heath, President of the Royal College of Surgeons of England; Dr. Walter G. Smith, President of the Royal College of Physicians of Ireland; Sir W. Thornley Stoker, President of the Royal College of Surgeons in Ireland; Dr. W. T. Gairdner, President of the Royal College of Physicians of Edinburgh; Dr. J. Struthers, President of the Royal College of Surgeons of Edinburgh; Sir J. Nicholas Dick, K.C.B., Director-General of the Medical Department of the Navy; Sir W. A. Mackinnon, K.C.B., late Director-General of the Medical Department of the Army; Sir William H. Broadbent, Bart.; Sir Joseph Lister, Bart., President of the Royal Society; Sir James Paget, Bart.; Sir Richard Quain, Bart.; Sir J. Russell Reynolds, Bart.; Sir Dyce Duckworth, Sir William MacCormac, Sir Douglas Maclagan, Sir Edward Sieveking, Dr. McCall Anderson, Dr. Mitchell Bruce, Dr. John Cavafy, Mr. Alfred Cooper, Dr. G. F. Duffey, Dr. J. F. Goodhart, Dr. Hughlings Jackson, Dr. Allan Jamieson, Dr. Robert Liveing, Dr. Payne, Dr. Douglas Powell, Dr. Pye-Smith, Dr. Hermann Weber; also Dr. Besnier, Professor Fournier, and Dr. Hallopeau, of Paris; Professor Leloir of Lille; Professor Lewin, Professor Köbner, and Professor Lassar of Berlin; Professor Neisser of Breslau; Dr. Unna of Hamburg; Dr. Veiel of Cannstadt; Professor Kaposi, Professor Neumann, Professor Lang, and Dr. Hans von Hebra of Vienna; Professor Schwimmer of Budapest; Professor Pick and Professor Janovsky of Prague; Professor Jarisch of Gratz; Professor Petersen and Professor Tarnovski of St. Petersburg; Professor Pospelow of Moscow; Professor de Amicis of Naples; Professor Pellizari of Florence; Professor Campana of Rome; Professor Boeck of Christiania; Dr. Welander of Stockholm; Professor Haslund of Copenhagen; Professor Castelo and Professor Olavide of Madrid; Professor Petrini de Galatz and Professor Kalindero of Bucharest; Zambaco Pacha; Professor Joannu of Athens; Dr. Duhring of Philadelphia; Dr. White of Boston; Dr. Nevins Hyde of Chicago; Dr. Bulkley, Dr. Keyes, and Dr. Fox, of New York; Dr. F. Shepherd of Montreal; and Dr. Graham of Toronto.

On the first day of the meeting after the preliminary business of the Congress has been dealt with Mr. Jonathan Hutchinson will deliver the presidential address, and the subject of Prurigo will be discussed by Dr. Besnier of Paris, Professor Kaposi of Vienna, Dr. J. C. White of Boston, and Dr. Payne of London. On Wednesday, Aug. 5th, the subjects for discussion will be the Etiology and Varieties of Keratosis and Syphilitic Re-infection; on Thursday, Aug. 6th, the Connexion of Tuberculosis with Diseases of the Skin other than Lupus Vulgaris, the Duration of the Period of Contagion of Syphilis, and Ringworm and the Trichophytons; and on Friday, Aug. 7th, the Nature and Relation of the Erythema Multiforme Group and Malignant Syphilis. Clinical demonstrations of cases will be given on Aug. 5th, 6th, and 7th, and various papers will be read during the progress of the Congress. Saturday, Aug. 8th, will be devoted to the clinical demonstration of cases, to be followed by papers.

Full information regarding the Congress can be obtained from the Secretary-General, Dr. J. J. Pringle, 23, Lower Seymour-street, London, W.

CHOLERA IN EGYPT.

THE manifestations of epidemic cholera which have appeared this year in Egypt have commenced earlier than in the epidemic of 1883 in that country, which began first of all at Damietta about the middle of June and lasted to September, and gave rise to a total mortality of over 25,000. Damietta, Alexandria, Chibin-el-Kon, and Cairo were the places most affected on that occasion. At the time of that outbreak there was no special activity of the disease in Arabia. There must always be some doubt as to the exact place and date of origin of an outbreak, but some sporadic cases of the disease seem to have appeared on the present occasion in Alexandria in March last. In the following month there were almost daily cases of cholera, and by the first three weeks of April these amounted altogether to 45 with 42 deaths. A few cases occurred in Cairo soon after the appearance of the disease in Alexandria. The disease has very slowly but steadily increased in Cairo. This outbreak in Egypt gave rise to a considerable exodus of the well-to-do classes, many of whom, it is understood, went to Marseilles. Two cases occurred in the 14th Soudanese Battalion at Tourah, where there is a large convict establishment. The disease has hitherto been very severe and fatal, some 80 or 90 per cent. of those attacked having died. On May 20th there were several fatal cases at Alexandria, at Cairo—in the old and new parts of the city—and some at Tourah-camp and other places. On the 22nd and 23rd there were 45 deaths from cholera at Alexandria and 75 at Cairo—mostly in old Cairo—and 8 at other places. On the 24th

there were 13 cholera deaths at Alexandria, 45 at Cairo, 15 at Tourah town, prison, and camp, and 9 deaths at other places. The total number of cases in Egypt at the present time is 115.

It does not appear that any cases have occurred among the British troops. Should it, unfortunately, happen that any of these are attacked the barracks will no doubt be forthwith evacuated and the troops moved out and encamped. The experience obtained in a former epidemic will not have been forgotten—viz., that the soldiers occupying an elevated site in the vicinity of Cairo had an immunity from the disease. One of the great things to be done in an epidemic is to select and occupy new and clean sites, to spread out the men as far as possible, and to have the freest ventilation. We have no doubt that even the movement of soldiers out of barracks in anticipation of, instead of after, an attack is occasionally the wisest course that can be adopted. The principal medical officer and medical staff in Egypt have, however, practical experience to guide them in dealing with epidemic cholera, and we may consequently feel every confidence in their judgment in this respect. The health of the British troops, however, continues to be excellent. The percentage of sick, including slight maladies, in the military hospitals on the 25th, according to telegraphic intelligence through Reuter's agency, was very low:—Cairo 6·06, Alexandria 4·81, Wady Halfa 4·83.

We wish that we could regard the sanitary state of Egypt generally, and of its towns in particular, as satisfactory as far as water-supply, drainage, and surface cleanliness are concerned. It is, after all, only during times of freedom from epidemics that the necessary work can be undertaken to prevent their occurrence, and it has been with a full knowledge of this fact that we have so constantly urged upon the Government of Egypt and of this country the grave importance of their duties and responsibilities in this respect. It will be a disgrace to our rule if we leave Egypt in the same unsanitary condition in which we found it. In finance, in the administration of law and justice to all classes alike, in education, and in promoting the greatest happiness of the greatest number England has done well in Egypt, but in sanitation and attempts at improving the public health little or nothing has been done up to the present time.

DEATH CERTIFICATION.

THE general meeting of the metropolitan counties branch of the British Medical Association was held on the 22nd inst., Sir William O. Priestley, M.P., presiding. The subject before the meeting was the improvement in the present procedure in death certification and registration, and from the report of the proceedings it is manifest that they took a very practical turn. Sir Henry Thompson moved the following resolution: "Considering that a Select Committee of the House of Commons has in 1893 made an extended inquiry into the subject of death certification and registration on the plan now followed in this country, and has reported that it manifestly fails to accomplish the purpose for which it was designed, this meeting is of opinion that Her Majesty's Government should be respectfully memorialised to bring in a Bill as soon as possible to give effect to an improved procedure in general accordance with the suggestions offered in the committee's report." Sir Henry Thompson passed on to observe that during the last twenty years or more the existence of grave defects in the system of death certification adopted in this country had not unfrequently been manifested, whether this system be regarded as a safeguard against criminal attempts on life or as a means of forming trustworthy records of disease for scientific purposes. He next referred to the fact placed before the Select Committee, that in 1892 no fewer than 15,000 cases of death occurred, in each of which no inquiry had been made into its cause and no certificate as to its cause had been forthcoming. This number of uncertified deaths formed a percentage of nearly three on the total number of deaths returned for the year. It also appeared that in 25,000 other deaths—a percentage of 4½—the cases were so inadequately certified as not to be classifiable, making together a class of 7½ per cent. in which no evidence of any value as to the cause of death existed. He suggested that they should forward a memorial to the Home Secretary with a request that he would consider the important work which had been already done by the Select Committee, and, if he saw fit, take steps to embody their recommendations in an Act of Parliament for the purpose of giving the country a greatly improved procedure in exchange for that at present employed.

In the absence of Dr. Farquharson, M.P., Dr. Isambard Owen seconded the resolution, and asserted that the State now winked at an exceedingly loose system of death certification, since under the present procedure it was possible for a medical man to give a death certificate on a patient whom he might not have seen for an interval of several weeks and perhaps months. The resolution was supported by Mr. Nelson Hardy, Dr. Alderson, Dr. Hugh Woods, and others, and was unanimously adopted. It is greatly to be hoped that other meetings may be held to discuss this very important subject, the resolutions adopted being forwarded to the local representatives in the House of Commons. While fully admitting the desirability of reform in our registration system, we would urge all members of the profession to avoid the somewhat pessimistic views adopted by the speakers at the Metropolitan Counties Branch. For is it justified by facts? Granting the 7½ per cent. of uncertified or badly certified deaths, and allowing 5½ per cent. for deaths certified by coroners, this makes 13 per cent., leaving 87 per cent. of the total deaths which may be assumed to be properly certified, and it must also be remembered that a proportion of deaths, by no means small, which the Registrar-General classifies as uncertified have been certified (in a fashion) by coroners after an informal inquiry. It is, therefore, most desirable that in criticising our death registration system it should be borne in mind that of the total number of deaths the large proportion of 87 per cent. are registered with a fair approximation to accuracy. Before, therefore, applying the legislative screw it will be well carefully to consider the present system so as to see where the defects are, and, this being ascertained, what are the reforms which should be made. The existing system has been in force in England and Wales for nearly sixty years, while death certification has been compulsory for twenty-two years. The deaths number in round numbers 550,000, being influenced by the presence or absence of epidemics, &c. As we have seen, with the exception of the percentage of thirteen no fault is apparently to be found, and this accords with every-day experience. In an overwhelming proportion of deaths the deceased is attended in the last illness by a registered medical practitioner, who gives a certificate of its cause (the correctness of which is not disputed) to a relative or friend. The death is registered, a burial order is given, and the body is buried. In cases where an inquest is held the coroner sends the cause of death as given by the jury to the registrar. The principal charges suggested by the Select Committee are that the body of a deceased person should not be disposed of either by burial or cremation without the certificate of a registered medical practitioner or of a coroner after inquest. This would imply that all informal inquiries by coroners are in future to be dispensed with. It is also recommended as a consequence of this that there should be appointed in every district a medical certifier to inquire into every uncertified death. The certificate of death is to be sent to the registrar direct and not to be given to the representatives of the deceased. The body is to be verified by the medical attendant, who is to be allowed a fee of half a crown for verification and certificate. That Medical attendance is to mean two visits before death within a fixed period of days. These and other recommendations will have to be most carefully studied before they are adopted in England and Wales. These parts of the United Kingdom have been divided into registration and coroners' districts which are presumably convenient, and the present system has been in working for more than half a century. It is a very grave question whether the suggestion of medical certifiers is a practical or workable one, and it is certain that coroners would strongly resent any encroachment upon their functions. So also with regard to the suggestion that the certificate should be sent directly to the registrar a very little reflection will show that this is wholly impracticable. What is really required is that the Act of 1874 should be carried out in the spirit as well as in the letter by medical practitioners, who should never give a certificate in any case which is doubtful, referring all such to the coroner. The registrars should in turn not accept a certificate which

is doubtful. Coroners should improve their informal inquiries and should have power to remunerate the medical practitioner called in for making an inspection of the body. Medical certificates should be given to the informant in a sealed envelope addressed to the registrar. In short, the present system should be improved in those points which need improving. These are much to be preferred to changes which would completely dislocate the present machinery without any compensating advantages.

THE SOUDAN EXPEDITION.

NOTWITHSTANDING that the Egyptian troops under the training and leadership of English officers and non-commissioned officers have undergone a remarkable improvement, and that their marching powers and endurance are undoubted, it seems to be still doubtful in the minds of many whether they will prove reliable in action if fiercely attacked by brave and determined troops like the Arabs. The Soudanese black regiments are, no doubt, excellent, and have also proved steady and reliable in a fight, but Egyptian regiments are composed of material which has been subjected to slavery and oppression from the time of the Pharaohs up to nearly the present period. The Egyptian soldiers are fine men in point of physique, patient, hard-working, and, in a military sense, well-trained and disciplined, but it seems to be still the opinion that they will require to be well "stiffened" by European troops when the advance on Dongola takes place. Anyway, the troops—both British and Egyptian—appear to be in excellent health and fettle at the present time. The power of the Khalifa is not what it was, and there seems to be little doubt that there is a good deal of disaffection and dislike to the present rule and a growing belief in the desirability of a change. If the Dervishes could only feel that they were to be subjected to English and not to Egyptian rule things would probably soon assume a different aspect, for, whatever may be the case now, the Arabs, with their courage and manly qualities of character, once had a firm belief in the fairness and justice of the British.

As regards the hospital accommodation and arrangements at the different stations everything appears to be in a satisfactory state, and, considering the great heat, the dust-storms, the fatigue and monotonous life, and the difficulties in the way of provisioning the force, the low sick-rate shows that the sanitary and hygienic arrangements of the expeditionary force must be uncommonly good. Time is the most important element in expeditions of this nature. The less the time at disposal the greater the pressure, of course, on all concerned and especially on the medical, commissariat, and store departments of an army. Happily, in the present instance, there has been sufficient time available for making all the preparations and arrangements for the expedition in a satisfactory way. The hospital accommodation at Akasheh is composed of huts and is good and sufficient, and the same may be said of that at the other stations; the sick transport arrangements are also working satisfactorily. It may be added that, as far as the officers of the force are concerned, the work has been very hard. The Nile is believed to be now rising. The past week has been comparatively uneventful; there has been no fighting, the Anglo-Egyptian force being simply on the alert and attempting to perfect their preparations for the future advance.

THE EVELINA HOSPITAL FOR SICK CHILDREN.—The report of this hospital for the year ending Dec. 31st, 1895, is a very satisfactory document so far as the management of the institution is concerned, but, like a great many more charities at the present time, the hospital requires increased support from the benevolent public. During the past year 782 children have been treated in the hospital. The total number of deaths during the year was 163; of these 31 cases were admitted moribund (dying within forty-eight hours), and in 83 the children were under two years. In the out-patient department 802 minor operations and about 1000 dental operations have been performed. Five hundred and twenty accidents have been attended to, 42 cases being admitted to the wards; of these 20 were of a serious character.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On the Sanitary Condition of the Borough of Pembroke, by Dr. R. J. REECE.—The borough of Pembroke, which includes Pembroke proper and Pembroke Dock, has the reverse of a satisfactory history and it has received seven visits from the medical department of the Local Government Board since 1878. The population has oscillated, but since 1871 it has undergone some steady increase until in 1891 it reached 14,978, and building operations are still in progress. In Pembroke proper the water-supply comes from a number of sources; these include local wells, both public and private, and they are in many instances open to the risk of pollution. One known as the Commons Well was condemned by Dr. Airy of the Local Government Board in 1879 and was referred to as a supply that should be closed, but in 1895 it was still in use. The wells in Pembroke Dock answer to much the same description and they cannot be regarded with any satisfaction in so far as wholesomeness and freedom from pollution are concerned. On the other hand, certain public supplies are available, and some further action has been attempted by the town council with the view of increasing the service from a tunnel driven into a hillside. The sewage outfalls from Pembroke are most imperfect. One, for example, is into a mill-pond connected with the Pembroke river; another is into the Commons Lake, a piece of marshy land through which a stream flows, and this stream is at times resorted to for a water-supply. The drains of Pembroke are very deficient, having originally been constructed of rubble to carry off surface water. At Pembroke Dock certain sewers have been constructed, but these are a cause of nuisance at their outfall, the sewage being deposited, for example, under wharves and on the foreshore. But the main part of Pembroke Dock is altogether unsewered. In the matter of house drainage, excrement disposal, &c., the sanitary administration of this borough also leaves much to be desired; but it is evident that the questions of water-supply and of sewerage are those to which the greatest importance attaches at the moment. Formal complaints have been addressed to the Local Government Board and to the town council in these matters, and it is impossible to dissociate Dr. Reece's recent visit and report from the action which the central department may determine to take as regards this borough. When Dr. Airy reported in 1879 he stated that the medical officer of health and the inspector of nuisances had kept the town council truthfully informed of the sanitary requirements of the district, but that the town council had a most imperfect realisation of their duty as a sanitary authority. With but trivial exception—the exception including the improvement of the Pembroke Dock water-supply—this statement is declared by Dr. Reece to be as true now as it was when it was penned seventeen years ago. The interests of the public as well as of the ordinary population are involved by reason of the Admiralty Dockyard, and it seems clear that some decided change of administration must now be insisted on in this antiquated and backward borough.

On the Prevalence of Enteric Fever in West Bromwich, by Dr. G. S. BUCHANAN.[1]—This report deals not only with a prevalence of enteric fever but it also enters with much detail into the sanitary conditions with which that disease has been associated. The population of the borough now exceeds 60,000, and for years past there has been excess of enteric fever. In 1890 the notified cases were 84, in 1893 they reached 91, and in the first ten and a half months of 1895 they were 112 in number. In seeking the causes of this occurrence Dr. Buchanan ascertained that there were many serious defects in the sanitary administration of the borough which can hardly fail to have had a distinct relation to the sustained prevalence of fever. This was especially the case with respect to the privy-middens and large ash-middens which prevail and which are definitely referred to as constituting a serious danger to the health of the inhabitants. The description given in the report as to this is about

[1] Eyre and Spottiswoode, East Harding-street, E.C.; John Menzies and Co., Edinburgh and Glasgow; Hodges, Figgis, and Co., Ltd., Dublin. 11 pp. 1896. Price 3d.

as disagreeable reading as anything could be, and it really becomes a marvel how some of our large boroughs can in these days maintain such a system. It is altogether monstrous that a sanitary authority should not deal with the "semi-liquid, evil smelling" matter of excrement, slops, and all sorts of offensive filth which foul the air around the several groups of houses, and which are allowed to accumulate until either the inspector of nuisances or, failing him, some householder chooses to call attention to the existence of a nuisance. It is the whole system which is wrong, for the very construction of such midden-privies must necessarily involve a recurring nuisance and source of danger to health. Happily, wells have been got rid of as local supplies of water and other amendments have been carried out, but in some respects—as, for example, in the faultiness of its refuse removal—West Bromwich remains much as it did when reported on by Dr. Ballard in 1875. Every point bearing on the health and sanitation in the borough, including its milk-supply, is discussed with much care in the report, which is the first one which the Local Government Board have issued from the pen of Dr. G. S. Buchanan. As the record of a careful inquiry into the administrative aspects of a large borough which has suffered from preventable disease it is a most carefully compiled piece of work, and recalls the excellence of the early work of the writer's father, the late Sir George Buchanan.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Liverpool Port Sanitary District.—The jurisdiction of the Liverpool port sanitary authority extends over a very considerable area, reaching as it does from the south side of the River Ribble on the north, to the north side of the River Dee on the south, and embracing the waters of the Mersey to a point considerably eastward of the entrance to the Manchester Ship Canal. The staff of the authority consists of Dr. E. W. Hope, medical officer of health of Liverpool, an assistant medical officer, and three sanitary inspectors of shipping. The completion of the Manchester Ship Canal has had the effect of converting Manchester into a seaport town and several inland districts into riparian districts. Arrangements have accordingly been made whereby the Liverpool port sanitary authority deal with cases of infectious disease found on vessels passing through the Liverpool waters but bound for Manchester, while the sanitary supervision of vessels themselves is left to Manchester. During 1895 the inspectorial staff of the Liverpool port sanitary authority inspected 3153 vessels, and no less than 50 per cent. of them were found in one or another sense to be defective from a sanitary standpoint. Defects: Total number, 3154; average per vessel, 2. (*a*) Of construction, 678 = 21·4 per cent.; (*b*) structural, 963 = 30·6 per cent.; and (*c*) dirt, 1513 = 47·9 per cent. The above is taken from the report before us. During 1895 there were 63 cases of infectious disease taken from vessels arriving at Liverpool, as compared with the average for the previous ten years of 33·9. Among the cases of non-notifiable disease which came to the knowledge of the authorities there were, we note, three cases of Beri-beri. The figures of emigration for 1895 show an increase on those for 1894 of 11,049, but it must be remembered that owing to the restrictions placed upon emigration to the United States there was a very large diminution in numbers during 1894. Among the 117,196 emigrants, 91,805 were bound for the United States and 20,385 for Canada, the month during which most emigrants embarked being August. The emigrants are medically inspected by medical officers appointed by the Board of Trade, but one of the port sanitary inspectors is present at each of these inspections to take charge of any who may be rejected by the medical examiners. Amongst those rejected during 1895 we note that scabies and alcoholism were common, as also were varicella and measles.

Ipswich Urban Sanitary District.—The population of Ipswich is estimated to the middle of 1895 as 60,022; the birth-rate for the year in question was 31·1 per 1000 and the general death-rate 18·7. There were eighty-six cases of enteric fever notified in the borough during 1892, and of this number no less than thirty-one occurred in the parish of Stoke. The population of Stoke is not furnished in the report before us, but we gather from the 1891 census that at that time it was 4099, a fact that would seem to indicate that, even allowing for a considerable increase during the last quinquennium, about one-third of the total cases of enteric fever occurred among a twelfth of the population. Mr. George Elliston states that his annual report for 1891 contained an account of a serious outbreak of enteric fever in Stoke, and he now adds that the recurring outbreaks of the disease in that locality "show that the drainage is utterly bad and no improvement in the health of the district can be looked for until it is properly sewered." Surely the Ipswich Corporation should now take the matter in hand. In that part of his report relating to the port of Ipswich Mr. Elliston states that several complaints were made during the hot season of the nuisance in the river at the main outfall works, and additional screening of solid matter was undertaken. It is to be regretted that a beautiful estuary like the Orwell should be thus polluted, and it is surely time that a proper method of treatment should be adopted for the sewage of Ipswich. We are glad to note in regard to the sanitation of individual houses that during 1895 some 250 privy middens were converted into waterclosets. It is to be hoped that in the next annual report Mr. Elliston will be able to record the drainage of California and Stoke.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6284 births and 3775 deaths were registered during the week ending May 23rd. The annual rate of mortality in these towns, which had been 18·5 and 18·4 per 1000 in the two preceding weeks, further declined last week to 18·1. In London the rate was 17·8 per 1000, while it averaged 18·4 in the thirty-two provincial towns. The lowest rates in these towns were 12·4 in Bristol, 12·5 in Brighton and in Hull, 12·6 in Leicester, and 13·8 in Cardiff; the highest rates were 22·9 in Birmingham and in Manchester, 24·5 in Sunderland, 25·4 in Oldham, and 26·0 in Salford. The 3775 deaths included 590 which were referred to the principal zymotic diseases, against 622 and 561 in the two preceding weeks; of these, 214 resulted from measles, 186 from whooping-cough, 83 from diphtheria, 50 from diarrhœa, 31 from scarlet fever, 25 from "fever" (principally enteric), and 1 from small-pox. No fatal case of any of these diseases was recorded either in Plymouth or in Swansea: in the other towns they caused the lowest death-rates in Wolverhampton and Bradford, and the highest rates in West Ham, London, Salford, Oldham, and Sunderland. The greatest mortality from measles occurred in Hull, Birkenhead, Sunderland, Portsmouth, and Oldham; and from whooping-cough in Cardiff, Newcastle-upon-Tyne, Salford, Preston, and Sunderland. The mortality from scarlet fever and from "fever" showed no marked excess in any of the large towns. The 83 deaths from diphtheria included 56 in London, 7 in West Ham, 5 in Birmingham, and 3 in Leicester. One fatal case of small-pox was registered in Bristol, but not one in London or in any other of the thirty-three large towns. There were 22 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 23rd inst., against 13, 15, and 20 at the end of the three preceding weeks; 5 new cases were admitted during the week, against 3, 5, and 6 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2596, against 2523, 2527, and 2539 on the three preceding Saturdays; 305 new cases were admitted during the week, against 236, 238, and 293 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 260 and 249 in the two preceding weeks, further declined to 218 last week, and were 87 below the corrected average. The causes of 46, or 1·2 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Bristol, Leeds, Hull, Newcastle-upon-Tyne, and in sixteen other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Preston, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·9 and 19·3 per 1000 in the two preceding weeks, declined again to 19·2 during the week ending

May 23rd, but exceeded by 1·1 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 13·7 in Perth and 15·0 in Paisley to 20·9 in Glasgow and 22·7 in Greenock. The 560 deaths in these towns included 29 which were referred to whooping-cough, 21 to measles, 18 to diarrhœa, 6 to "fever," 5 to scarlet fever, 3 to diphtheria, and not one to small-pox. In all, 82 deaths resulted from these principal zymotic diseases, against 76 and 69 in the two preceding weeks. These 82 deaths were equal to an annual rate of 2·8 per 1000, which corresponded with the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 30 and 25 in the two preceding weeks, rose again to 29 last week, of which 25 occurred in Glasgow, 2 in Aberdeen, and 2 in Paisley. The deaths from measles, which had been 11 in each of the two preceding weeks, rose again to 21 last week, and included 18 in Glasgow and 2 in Dundee. The deaths referred to different forms of "fever," which had been 4, 9, and 14 in the three preceding weeks, declined again to 6 last week, of which 5 occurred in Glasgow, where the 5 fatal cases of scarlet fever were also recorded. The 3 deaths from diphtheria corresponded with the number in the preceding week, and included 2 in Edinburgh. The deaths referred to diseases of the respiratory organs in these towns, which had been 88 and 110 in the two preceding weeks, were 109 last week, and slightly exceeded the number in the corresponding week of last year. The causes of 38, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 21·9 and 22·8 per 1000 in the two preceding weeks, further rose to 23·7 during the week ending May 23rd. During the past eight weeks of the current quarter the death-rate in the city has averaged 23·4 per 1000, the rate during the same period being 18·6 in London and 17·7 in Edinburgh. The 159 deaths registered in Dublin during the week under notice showed an increase of 6 upon the number in the preceding week, and included 9 which were referred to the principal zymotic diseases, against 13 and 5 in the two preceding weeks; of these, 3 resulted from whooping-cough, 3 from "fever," 1 from small-pox, 1 from scarlet fever, and 1 from diarrhœa. These 9 deaths were equal to an annual rate of 1·3 per 1000, the zymotic death-rate during the same period being 3·5 in London and 0·9 in Edinburgh. The 3 fatal cases of whooping-cough exceeded the number in any recent week. The deaths referred to different forms of "fever," which had been 7 and 0 in the two preceding weeks, were 3 last week. The mortality from scarlet fever corresponded with that recorded in the previous week, and the fatal case of small-pox was the first registered within the city during the past six weeks. The 159 deaths in Dublin last week included 22 of infants under one year of age, and 31 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked decline from the numbers in the preceding week. Eight inquest cases and 7 deaths from violence were registered; and 68, or more than a third, of the deaths occurred in public institutions. The causes of 7, or more than 4 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

SURGEON-MAJOR SIMPSON has embarked for South Africa and Surgeon-Captain Perry has been appointed to succeed him at the Royal Arsenal, Woolwich. Surgeon-Captain Jevers has been appointed to the Medical Charge at Dorchester and Surgeon-Captain Cummins to Hounslow. Surgeon-Captain Lavie has arrived in Egypt. Surgeon-Captain Burke has embarked for the West Coast of Africa and the arrival there of Surgeon-Captains Hosie and Josling is reported. Surgeon-Captain Browne has been transferred from Buttevant to Cork.

ARMY MEDICAL STAFF.

Surgeon-Lieutenant-Colonel Robert Blood, M.D., has been appointed Brigade-Surgeon-Lieutenant-Colonel, vice J. P. H. Boileau, M.D., F.R.C.S.I., retired.

INDIA AND THE INDIAN MEDICAL SERVICES.

Surgeon-Lieutenant-Colonel P. A. Weir (Bengal) is appointed to officiate as Residency Surgeon in the Western Rajputana States, with effect from the date of assuming charge and during the absence on furlough of Surgeon-Lieutenant-Colonel A. Adams, or until further orders. Surgeon-Captain P. J. Lumsden, Residency Surgeon in the Persian Gulf, is appointed to officiate as Medical Officer of the Deoli Irregular Force and of the Haraoti and Tonk Political Agency, with effect from the date of assuming charge, vice Surgeon-Lieutenant-Colonel P. A. Weir, M.B., and during such time as Surgeon-Captain H. R. Woolbert, M.B., may officiate as Residency Surgeon in Mewar, or until further orders. Surgeon-Major F. F. Perry, Professor of Surgery, Lahore Medical College, is appointed to officiate as Principal of that College, in addition to his own duties, during the absence on leave of Surgeon-Lieutenant-Colonel S. H. Browne, or until further orders. Brigade-Surgeon-Lieutenant-Colonel Robert Jameson, Deputy Sanitary Commissioner, North-West Provinces and Oudh, retires from the service.

NAVAL MEDICAL SERVICE.

Inspector-General of Hospitals and Fleets Adam Brunton Messer, M.D., has been placed on the Retired List.

The following appointments are announced:—Surgeons: J. C. Ferguson, B.A., M.B., to the *Herald*; H. E. South to the *Victory*, additional for the *Duke of Wellington*; W. H. S. Stalkart, M.D., to the *Mosquito*; and A. S. Nance to the *Edinburgh*.

THE LATE ASHANTI EXPEDITION.

The late Ashanti expedition seems likely to be productive of great benefit in many directions. There is every reason to hope that an end will be put to the frequent raids and incursions of the Ashantis into the districts in their vicinity, that a great check has been imposed upon slavery, and that the downfall of Prempeh will be followed by the total prohibition of human sacrifices and other cruelties. The political and commercial consequences of the expedition will likewise be considerable. Let us hope, now that we have a dominating control over that part of the country, that attempts will be made to improve the sanitary condition of the stations occupied by us. The loss of life on the West Coast of Africa from fever and climatic disease is terrible. Numbers of young men go out from this country to that part of Africa only to die there or to return invalided to England with their health and strength wrecked and shattered. A very careful inspection of the districts occupied by Europeans should be made with a view to the total abandonment of the most unhealthy and the selection of the best stations that can be found; and attempts should be made to drain the soil, to harden and cleanse its surface, to make roads, and to clear away superfluous vegetation. Proper habitations, well raised above the soil, should also be provided.

DEATH IN THE SERVICES.

Deputy-Inspector-General R. J. Sweetnam, R.N. (retired), at Mount Pleasant, Dawlish, on the 20th inst., aged fifty-three. He joined the Navy as a surgeon in February, 1864, and in the following year was present at the action of Ikorudu, in the Lagos Lagoons. For his services in attending the wounded on the field on this occasion he was mentioned in despatches, and received the thanks of the Secretary of State for War. He was in medical charge of the Niger expeditions 1864–66 and was the author of the "Rules and Regulations for Preserving the Health of Ships' Companies in Lagos Lagoons and the Niger," which have been embodied in the North-East Africa "Station Order-book."

THE ROYAL CAMBRIDGE ASYLUM FOR SOLDIERS' WIDOWS.

Lord Wolseley presided on Tuesday last at the forty-fifth annual general court of this institution, when it was announced that there were sixty-six widows in the asylum each receiving 7*s.* a week and a coal allowance. A new system of nursing the aged and infirm had been inaugurated, but owing to want of funds there would be no election of inmates this year. The receipts for the year amounted to £3000 and payments to £4000, £1399 of which had been invested.

ROYAL MILITARY TOURNAMENT.

The Royal Military Tournament opened yesterday at the

Agricultural Hall, Islington. Surgeon-Major Alexander of the Coldstream Guards, the medical officer in charge of the troops, is assisted by Surgeon-Major Lawless, A.M.R., and Surgeon-Lieutenant Kenneth Cameron, A.M.S.

H.R.H. the Princess Louise will open the new Headquarters of the London Companies Volunteer Medical Staff Corps, Calthorp-street, and distribute ambulance prizes on on Wednesday, June 10th.

Correspondence.

"Audi alteram partem."

MEDICAL CERTIFICATES AND PUBLIC ELEMENTARY SCHOOLS.

To the Editors of THE LANCET.

SIRS,—In connexion with the remarks in your issue of this week on the subject of Medical Certificates and Public Elementary Schools will you allow me to call attention to a recent departure in the practice of the Education Department which, if followed out and insisted upon, is certain to do much harm by impeding some of the most obvious and important steps which should be immediately taken in connexion with incipient epidemics of infectious disease amongst school children in rural districts? I use the term "fresh departure" advisedly, because there happens to be a larger number of separate public elementary schools in the extensive area for which I act as executive medical officer of health than in the case of any other medical officer of health in England and I am almost daily called upon to give certificates of some kind or other in connexion with public schools, but it is only on one or two very recent occasions that I have met with a demand for such a certificate as is referred to below. All medical officers who have had much experience in rural districts in the etiological investigation of epidemics of such diseases as diphtheria, scarlet fever, whooping-cough, and measles will agree with me that in sparsely populated districts the public school is as a rule the predominant source of infection and that in the majority of cases the dissemination takes place through mild and medically unattended cases affected so slightly as not to attract serious attention even from their parents and who either attend school personally or, if remaining at home with what is called (and often generally believed to be) merely "a cold," their brothers and sisters continue to attend school.

Medical attendance is less accessible and of necessity much more frequently done without by the working classes in rural districts than in urban districts, so that a large proportion of cases escape notification and often, after a few days' illness with "a cold and a bit of a rash or of sore-throat," children are sent back to school in response to the customary printed form of notice either to send the child or a medical certificate. Often and often when remonstrating with parents for sending children to school whom, although not medically attended, they must have known were suffering from a prevailing epidemic, I have been met with the production of the formal printed notice to send the child, also with the remarks by the mother that "the child was not bad enough to need a medical man and they were afraid of being summoned, and they thought if any harm did come through the child going to school they would not be to blame after receiving such a notice." It is in such cases as these that the cordial coöperation of a zealous and intelligent school teacher is of the utmost assistance to sanitary officials in carefully excluding all justifiably suspicious cases and all children from families where there is reason to believe any are ill with the prevailing complaint, although no medical man is in attendance. Such assistance school teachers are as a rule most anxious to afford, but their hands are already, as it is, very much tied by the regulations requiring the child's attendance or a medical certificate; but if the new departure of the Education Department is enforced they will be very much more tied, as this requires that, on counting up the number of attendances made by a child in the calculation of the daily average attendance of a school for the purpose of the grant in aid, before any allowance can be made for absence through illness under the 101st article of the code it must be shown that the child had been excluded by a special order of the sanitary authority referring separately to each child, and stating beforehand the date at which the exclusion was to commence and when it was to cease. This article in the code is not new, but the practical application of it in the way referred to in this letter is new, at least in my experience, and constitutes the new departure in practice to which I wish to direct attention.

As I write this I have before me an official letter from the Education Department in which it is stated, in reference to a number of children who had been most properly excluded from school during an epidemic of scarlet fever—either because a brother or sister was notified as suffering from scarlet fever, or some children in a house were with good reason suspected of being similarly affected but with ill-defined and exceedingly mild symptoms and medically unattended, or for some other good reason on my advice as medical officer of health—that the Education Department decline to make any allowance unless it can be shown that the children were so excluded by a previous special order of the sanitary authority. Considering that to be of any service exclusion should be immediate and that as a rule sanitary authorities meet, as in the present instance, once a month only, the absurdity is too patent to merit comment. That the term "sanitary authority" is here used by the Education Department in its technical and legal sense—viz., as the sanitary council of the department—is obvious from a reference to Clauses 88 and 101 in the 1896 Education Code. Even assuming each sanitary authority to have power to transfer its responsibility in such cases to the medical officer of health, his visiting, diagnosing, and writing orders in each individual case will involve very injurious delay, to say nothing of an enormous number of immediate and often unnecessary visits and certainly in many cases a very undesirable clashing with private medical practitioners. In a similar case which came under my notice a few weeks ago and in which the orders for exclusion were similarly demanded by the Education Department if any allowance was to be made, the epidemic had been one of whooping-cough and only a few of the most severe cases had been medically attended. The schoolmaster had simply used his common sense and good judgment to exclude children coming from houses in which it was a matter of notoriety and an admitted fact that the children were suffering from whooping-cough.

Such unnecessary and impracticable regulations tend to restrict personal discretion and to check the salutary zeal for the prevention of disease with which school teachers are often imbued.

I am, Sirs, yours faithfully,

W. N. THURSFIELD, M.D. Edin.,
Medical Officer of Health for a number of Sanitary Districts in Shropshire and Seven Adjacent Counties.

Shrewsbury, May 23rd, 1896.

"REGISTRATION OF MIDWIVES."

To the Editors of THE LANCET.

SIRS,—I desire to thank you for your kind and appreciative notice of my labours in connexion with this unhappy and unfortunate midwifery business.

Your wise remarks as to the necessity which exists, in view of any practical legislation, of greatly simplifying suggestions in connexion with this subject are well timed, and will I hope be taken to heart by the Midwives Institute and its supporters. Not only are the geese of these people all swans, but their very ducks belong to the same species. The importation by them of so exalted a body as the Privy Council into the administration of what after all is a very humble matter, is a good example of unconscious humour and also of the fact mentioned. It reminds me of the case of the governor of a certain German castle, who was severely taken to task for having omitted to fire a Royal salute upon a necessary occasion. The poor governor gave the following reasons for his apparent neglect of duty: (1) that he had no proper artillerymen, (2) that his powder was bad, and (3) that there was not such a thing as a cannon on the premises. The last reason might have sufficed and been fairly conclusive. The Midwives Institute and its supporters have apparently plenty of cannon, although perhaps, after all, they are not very big guns and are more suitable for firing salutes than for practical warfare. They will, no doubt, learn in time that by using a simple musket they would be

able to shoot with much greater accuracy and precision and with infinitely better results.

I am not sure that the suggested creation of an expensive and complicated system of midwives boards stands in much better case than the suggestion anent the Privy Council. It is invariably a wise thing to resist the beginnings of evil, and the absence of these boards would greatly tend to promote simplicity and economy in dealing practically with this question. I certainly regard them as more ornamental than useful. It is in this connexion a very remarkable fact that, while we have heard on all hands of the great things which have been done in other countries in connexion with the registration of midwives—the Austrian Minister of the Interior and the regulations issued by him have been, for example, a perfect Godsend to the council of the Lancashire and Cheshire Branch of the British Medical Association in connexion with their Bill—it never apparently occurred to any of these Bill promoters that the Local Government Board is the Ministry of the Interior in these islands and that its medical department is in the highest degree qualified to deal with certain aspects of the present question. All sanitary details should, for example, be left absolutely to its discretion, so that they might be varied from time to time as the progress of knowledge and altered circumstances might dictate. A "complication" of labour within the meaning of the Act would not, of course, be a varying quantity and should be definitely stated in the Act itself. How natural also in this connexion it would be to avail ourselves of the complete network of sanitary administration spread over the country. The local medical officer of health, having received his instructions from the Local Government Board, would annually issue to the midwifery nurses upon his register a copy of the sanitary precautions they must take and a list of "complications" the presence of which would demand medical assistance. In this way two desirable objects would be attained: (1) the nurses would be annually reminded of their duty in these respects; and (2) they would be kept in touch with the local administration.

The General Medical Council, having already many duties to perform, is naturally very shy about being too closely connected with any Act for registering midwives, but I am afraid that in any Act which would in any measure do justice to our profession some action on the part of the General Medical Council is absolutely indispensable. Its duties, however, need not be very onerous and would be mainly three: 1. To formulate rules for the guidance of members of the profession engaged in the training of midwifery nurses and to see that they were observed. In this way the midwife manufacturing business would be brought within the limits of what was reasonable and necessary, and the advantages to be derived from being a registered medical student and pupil midwife would again become more real and less problematical. 2. To increase from time to time the six months' minimum training, if necessary and desirable. 3. To nominate examiners and institute examinations should they be found necessary, which, in my opinion, they are not. Under any systsm of registration the training of these women will form a humble but integral part of the medical education of the country, and the General Medical Council certainly is the proper authority to deal with the matter, although there is no reason why the examinations should be either elaborate or costly. Their absence would certainly simplify matters, although there is no apparent reason why, if instituted in the way suggested and not made too numerous they should not pay for themselves. I attach, however, no great value to these suggested examinations and regard the training as the one question of primary importance: it is, perhaps, needless to say that the present system should, as far as possible, be carefully avoided. To inflict upon these very partially educated women learned and long-winded harangues upon the science and art of midwifery seems to me a proceeding of very questionable taste and utility. The aim of any real training should rather be to drill into these women day after day, not only by precept but also by example, the infinite importance of cleanliness, of patience, and of kindly consideration in the discharge of their duties, and to endeavour as far as possible to make them masters of the practical management and hygiene of a normal case of labour and of the nursing details essential to the comfort and welfare of every parturient woman. It is neither necessary nor desirable that these women should aspire to be amateur doctors or even specialists in their own department, although no doubt some advances have already been made in this direction. "You are suffering from inflammation of the overtures" said one of these highly educated and diplomatised ladies recently to a confiding client. I dare say the poor client believed her; but our profession will no doubt be well advised in very politely declining any "overtures" of that description. The educational overture should be set to an entirely different tune. It might further be quite fairly urged against the necessity for any examination that the majority of the candidates in midwifery nursing who might afterwards undertake the duties of a midwife would probably be young and middle-aged widows of moderate education and good moral character who had been to some extent sobered by the cares of life and who would have many powerful incentives to diligence and care during the period of their training. The proposed midwifery nurse, then, having received such a training as I have indicated and having the medical officer of health to supervise her on the one hand and the medical practitioner to assist her when necessary upon the other, would be fairly launched upon the sea of life. Would the legal creation and recognition of such a woman be detrimental to the welfare of our profession? I cannot suppose that it would. It is, at least to me, quite obvious that the profession would do well to consider the facts connected with this subject wisely, lest they should be considered and dealt with in a manner which might prove very unwise. I have, however, no doubt that in dealing even with this thorny subject the profession will prove itself worthy of its traditions, neither forgetting what are its just and lawful rights nor wrapping itself up in an impenetrable cloak of ignoble selfishness, but that in this as in all things it will remember those higher claims of humanity to which it has never turned a deaf or an indifferent ear. "To do justly, and to love mercy" should be the aim of every one of us.

I am, Sirs, yours truly,

Salford, May 27th, 1896. WM. FRASER.

A DECEPTIVE ETHER INHALER.

To the Editors of THE LANCET.

SIRS,—I remember some years ago hearing of a case in which a patient was anæsthetised with a Clover's inhaler pure and simple. When the operation had been successfully concluded it was discovered that the ether bottle had never been opened, and that the only anæsthetic used had been the carbonic acid manufactured by the patient himself. I have recently had a somewhat similar experience which is, I think, worthy of record. I had occasion to anæsthetise a lad aged fifteen years in order to reduce a dislocation of the patella. As I was working single-handed I naturally preferred to give ether, and I used for the purpose a Clover's inhaler which had not been used before since it reached me from the maker. Having poured in a measure of ether I began the administration with the indicator at "0," and gradually rotated the box until after about two minutes the pointer stood at "Full." The patient did not cough at all and struggled very little. By the time the indicator was at "Full" he had passed into a condition of partial anæsthesia and in this state be continued for some minutes. Muscular relaxation was not complete and the corneal reflex was not abolished, but cyanosis was so marked that I did not think it wise to carry out the rule I learned from Dr. Hewitt, to keep the inhaler closely applied until the breathing became stertorous, and only then to begin to allow the patient an occasional breath of fresh air. Owing to the cyanosis, though stertor was not present and the pupils had not begun to dilate, I removed the inhaler for a breath after every eight or ten breaths. It was quite apparent that the patient was not getting enough ether to anæsthetise him fully, and as the room was rather cold I thought that defective evaporation might account for it. I therefore applied hot sponges to the box of the inhaler, but the patient's condition remained unchanged. Twice I laid aside the inhaler for a moment and endeavoured to reduce the dislocation, but each time I found that muscular relaxation was not complete, and that the patient (who was otherwise quiet) resisted my manipulations. Finally, after about ten minutes, during all of which time the indicator was at "Full" and the patient had only an occasional breath of fresh air, I gave up the ether in despair, administered chloroform to complete anæsthesia, and reduced the dislocation without

difficulty. When I came to examine the vitals of the ether inhaler the mystery was cleared up. The marks on the box were liars; when the indicator was at "0" the patient was receiving the full blast of ether, and when it was at "Full" he was receiving back from the bag nothing more than his own breath. But this was not simply the fault of the engraver, for the "0" is where it is usually placed in the instrument made by Messrs. ——, beneath the side-tube through which the ether is poured into the box. The inhaler itself is at fault—a case of "transposed viscera." The inhaler was made by one of the best-known firms in London. I am not desirous of publishing the name of the makers, for this incident has not shaken my confidence in the quality of their goods; but I shall write privately to inform them of the practical joke they have played on me. Perhaps the most remarkable fact about the whole experience is that the patient did not cough at the outset of the administration, when, with the index at "0," he was receiving the full blast of ether. I have since tried it myself and find the effect of this strength of ether vapour on a membrane not yet dulled by commencing anæsthesia extremely irritating.

I am, Sirs, yours truly,

Nagasaki, Japan, Feb. 6th, 1896. MAURICE EDEN PAUL.

EUPHORBIUM AS A CAUSTIC.

To the Editors of THE LANCET.

SIRS,—The following particulars may be of interest to some of your readers. I was staying in the country in Normandy last year and was asked one day, in an unofficial way, what was a good thing for "warts." The mention of the different "folk," magical, and cabalistic methods led to a general discussion of the subject, and at last the proprietor of the hotel related the case of a child who had been treated for months without any benefit by the leading skin specialists for innumerable warts on the face, and who had been cured in a few days by a local sorceress. The remedy used was the fresh milky juice from the stems of the common garden euphorbium, a weed that is plentiful in those parts. It so happened that one of the kitchenmaids at the hotel had recently developed a crop of warts on the hands and she very willingly consented to become the subject of an experiment, which was entirely successful. The application of the juice leads to the formation of a blister under the wart, which falls off in due time. According to Dorvault, a French text-book on pharmacy, exotic euphorbium enters into the composition of an "everlasting blister" into some topical applications for cancer in veterinary remedies, and the "Aveloz nült," a cancer specialty, consists also of it. The dried gum resin requires the greatest caution in manipulation on account of the irritating nature of the powder. Folkard[1] says that a variety is cultivated in India as a sacred plant, prayers being addressed and hogs sacrificed to it.

I am, Sirs, yours faithfully,

Rue Vernet, Paris, May 14th, 1896. OSCAR JENNINGS.

PIG *v.* OX BILE TABLOIDS IN JAUNDICE.

To the Editors of THE LANCET.

SIRS,—As success in treatment sometimes depends more on the kind and mode of preparation of the remedy employed than anything else, from having noticed the remarks in the Laboratory Record of THE LANCET of May 16th on the advantages of coating bile tabloids with keratin to enable them to pass through the stomach undissolved into the intestines, where alone they are of therapeutic value in cases of jaundice, I desire to supplement those judicious remarks by what appears to me would be a useful hint to manufacturing pharmacians from a therapeutic point of view, and that is to employ in their preparation pig's instead of ox bile, for the important reason I pointed out in a work on the various forms and treatments of jaundice some thirty years ago, that from the ox being a herbivorous animal its bile is but ill suited for the purposes it is intended in a flesh-eating animal such as man is; whereas the pig being omnivorous like the human being, its bile contains exactly the ingredients necessary to supply the place of those that are absent from the digestive canal in cases of jaundice in the human being, which ox bile does not. Why, then, one naturally asks, should our pharmacians put ox bile into their tabloids when it is quite as easy for them to obtain and use pig's bile—seeing that the object in view in prescribing another animal's bile is to prevent the patient from emaciating and dying from inanition in consequence of his food not being properly digested and prepared in the intestinal canal for the purposes of absorption and assimilation? For if the food be not rendered fit for the body to assimilate it, it might just as well not be given to the patient at all, in so far at least as the object held in view is concerned. As I know manufacturing pharmacians desire to aid the practitioner in combating disease and death by every means in their power, and that they are always willing to adopt all reasonable improvements both as regards the modes of preparation and the forms of administration of drugs, I trust the calling their attention to such an important therapeutical suggestion as the above—founded as it is on true physiological principles—in the pages of THE LANCET will have the desired effect.

I am, Sirs, yours faithfully,

Harley-street, W., May 22nd, 1896. GEORGE HARLEY.

[1] Plant Lore Legends and Lyrics.

"THE OPTICIAN *v.* THE OPHTHALMIC SURGEON."

To the Editors of THE LANCET.

SIRS,—My attention has been directed to the admirable article in THE LANCET of May 9th on the relations between oculist and optician, and I may say at once that I entirely concur with the spirit of your remarks; but in dealing with the matter—very naturally and rightly from the standpoint of the medical profession—you seem to me to do us traders rather scant justice, and I therefore crave permission for a few words from the point of view of the optician, and the essence of my protest lies in your use of the word "encroach." Surely, if the word is to be used at all it is rather applicable to the oculist than to the optician; but the word is not a nice one and I would prefer to represent the state of affairs in this way. The correction of defective sight by means of spectacles has remained for centuries almost entirely in the hands of the trader; but the great increase during the last thirty years in the knowledge of ocular refraction and the therapeutic use of spectacles has lifted the whole matter into the professional sphere. But in this connexion it should be recognised that we are still in a state of transition. I think the majority of opticians—those, at least, who have a due sense of the responsibilities involved—look forward hopefully to a time when people will go as naturally to the medical practitioner for advice on eye and sight troubles as they do now for defects of hearing. I think, too, they are doing good work, each one according to his opportunities, towards bringing that time about. But there are many difficulties that the optician has to meet, such as the refusal of people to take their defects of sight seriously, ignorant prejudice, the ingrained habit of old-fashioned customers, and, not least common, the specialist's fees. No doubt time will dissipate these difficulties, but meanwhile it would be generous—one might almost say just—to make allowances for them and to give the optician credit for doing his best to adapt himself and his business to the new conditions.

I am pleased to think that in my main view of our present duty I am absolutely in accord with the recommendations of your article. No encouragement should be given to proposals for measures, legislative or other, such as have recently agitated the State of New York. Feelings of rivalry should be restrained and the issue left to easy and natural development.

I am, Sirs, yours truly,

New Bond-street, W., May 21st, 1896. W. A. DIXEY.

SHORTHAND IN MEDICINE.

To the Editors of THE LANCET.

SIRS,—With reference to the remark in your annotation on our petition to the General Medical Council I may point out that the petition is for "shorthand," and not any one system, to be allowed to bear some marks to those who choose to present it. The wide use of phonography has been, perhaps, unwisely referred to in the petition, but the College of Preceptors accept any system of shorthand as an optional subject at the same examination as is recognised by the Council. Those who are passing it for the medical profession, however, do not present shorthand because the General Medical Council has not included it as a subject for

which marks may be given. Any really legible system of shorthand will serve for personal use, but uniformity of system is necessary for intercommunication and for such help to acquisition and familiarity as our publications and circulating manuscript magazines present. Each of the latter is in effect a small society for the discussion of medical questions without need for proximity of the members. I have reason to think that many members of the profession and students have acquired shorthand who have not yet joined our society. May I take this opportunity of asking them to do so without delay and to write to Dr. Neil, Warneford Asylum, Oxford, our honorary secretary?

I am, Sirs, yours faithfully,

May 27th, 1896. W. R. GOWERS.

"POOR-LAW OFFICERS' SUPERANNUATION BILL."

To the Editors of THE LANCET.

SIRS,—The above Bill has been passed so rapidly through the committee stage that several very necessary amendments have not been inserted into it. Many months since it was pointed out to its promoters that the Bill as it stood would operate very strongly against the interests of trained nursing in Poor-law infirmaries, and, indeed, that the Bill appeared to be drafted in the interests of some of the superior officers, who would derive benefit from the salaries of their inferiors. Thus the trained nurse rarely stays any length of time in a Poor-law infirmary; the conditions under which her work has to be done are so antagonistic in most cases to the proper performance of those duties that she will not stay beyond her probationership or beyond the time she is bound by the terms of her training. Again, a trained nurse is past her work soon after fifty. At Guy's Hospital she is compulsorily retired at fifty, at the London Hospital at fifty-five. The Royal National Pension Fund for Nurses, it is true, puts the age for compulsory retirement at sixty, but at the request of the authorities of Guy's Hospital the nurses there are permitted to retire under their scheme at fifty, and they have recently added another table to their previous ones with a view to encouraging the retirement of trained nurses at this age. No one would voluntarily be attended by a trained nurse who was close on sixty years of age, yet the Bill I am referring to puts the voluntary age for retirement at sixty and the compulsory one at sixty-five. It is evident that under such regulations few trained nurses will enter Poor-law infirmaries. It is true that a recent amendment has been made to Clause 8, providing that any person not dismissed for her own fault shall have her payments returned to her, but there is a considerable probability that this clause may be interpreted to mean that the deductions from the salaries will only be returned if the nurse remain a certain minimum period of time, and this will operate as unfavourably as the original clause. I am informed that all the Poor-law infirmary authorities, nursing and medical, are strongly opposed to the Bill on these grounds, and I have no doubt but that if the required amendments be not inserted it will even now be blocked. It is so difficult to get the proper class of persons to take up workhouse infirmary nursing or even to enter as probationers that nothing which increases this difficulty will be tolerated. May I ask for your powerful support in this matter?

I am, Sirs, yours faithfully,

Fellows road, N.W., May 28th, 1896. F. R. HUMPHREYS.

"THE ARMY MEDICAL STAFF."

To the Editors of THE LANCET.

SIRS,—With your permission I would wish to endorse every word in the letter of "Brigade-Surgeon, A.M.S.," published in THE LANCET of May 9th. It is, I consider, the most to the point and the best of the many letters written on this subject. After more than a score of years spent in the service I have no hesitation in saying that the advances which have been made within my memory have been enormous. Never before was the soldier so well looked after in health and so well treated and nursed when sick, and never before would he be so well cared for in war, within the limits of numbers, as at the present day. I am confident that the soldier generally recognises this though his officer may not, as the latter no longer has his familiar friend—or drudge, as the case may be—"old pillbox" at his elbow. Let not the authorities hastily or unadvisedly sweep away this organisation, the result of care and forethought, and which has necessarily taken a generation of medical officers to bring up to its present, I maintain, high standard. Rather let them make the service, by one means or the other, sufficiently attractive to induce a desirable stamp of man to compete for it. The tangible grievances of the service are, I consider, three—viz., (1) the large proportion of foreign service, at present equalling about three-fourths of the whole; (2) the non-recognition of various warrants and ill-treatment of medical officers by the Indian Government; and (3) the frequent changes of station of junior medical officers at some of the home stations. The first two could be rectified by the Indian Government taking over the medical treatment of white troops in India, as I see has been frequently advocated of late; and considering the treatment they have received in India and the depreciated rupee I think the Army Medical Staff would be but little the losers. The abolition of half-pay appointments and a relatively larger number of medical officers serving at home, together with a headquarters order on the subject, would meet the third, which is an important one from the patient's point of view, as it often leads to change of medical men in treatment of his case. Most of the sentimental grievances would disappear in course of time with a generally higher class of medical officer, and at those which did not we could afford to smile.

I am, Sirs, yours truly,

May 23rd, 1896. ACTIVE LIST.

PROFESSIONAL CONFIDENCES.

To the Editors of THE LANCET.

SIRS,—Can you or any of your readers give me any help with regard to the following circumstances? A few days ago I was called in to see a young unmarried woman who had recently miscarried. On inquiring if any instrument had been used she admitted that it was so. For some days the patient was in a very critical condition, but is now going on all right. Ought I, seeing that the attempt to procure abortion is in itself a criminal offence, to report the case to the police?—I am, Sirs, yours faithfully,

May 26th, 1896. YOUNG PRACTITIONER.

*** We should say "No." The information was obtained *sub sigillo*, and we do not think it is the duty of a medical man to give information to the authorities under such circumstances as our correspondent details.—ED. L.

THE ST. GEORGE'S HOSPITAL GRAPHIC SOCIETY.—The annual general meeting of this society will be held at the hospital on Tuesday, June 2nd, at 2.30 P.M. By permission of the board of governors the annual exhibition, which is strictly limited to the work of members, will be held in the board-room of the hospital. The exhibition will be opened immediately after the meeting and will remain open until the end of the week.

THE DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—The annual general meeting and conference of this society was held on May 20th, Dr. P. H. Pye-Smith, F.R.S., President, being in the chair. The reports of the council and treasurer were adopted and the following were elected office-bearers for the ensuing session:—President: J. F. Payne, M.D. Vice-presidents: Dr. McCall Anderson, Dr. J. Hughlings Jackson, Dr. Robert Liveing, Dr. P. H. Pye-Smith, and Dr. S. Wilks. Treasurer: Dr. Stowers. Council: Dr. P. S Abraham, Dr. R. Bowles, Dr. H. A. G. Brooke, Dr. J. Galloway, Dr. A. J. Harrison, Dr. S. Mackenzie, Dr. Walter Smith, Dr. F. Taylor, Mr. Anderson, Mr. A. Cooper, Mr. J. Hutchinson, and Mr. B. Shillitoe. Secretaries: Mr. L. A. Bidwell and Mr. G. Pernet. After a vote of thanks to the retiring President Dr. Payne took the chair and gave his introductory address on the Etiology of Diseases of the Skin, with special reference to impetigo contagiosa and eczema, and the *rôle* of micro-organisms. Dr. Walter G. Smith (Dublin) read a paper on the Properties of Chrysarobin and Chrysophanic Acid. Dr. Stopford Taylor, Dr. Waldo, and the President discussed the paper. The following cases were also shown:—Dr. D. Walsh: (1) Elephantiasis; and (2) Thimble Eczema. Dr. A. Eddowes: (1) Unilateral Lupus Erythematosus; (2) Ichthyosis; (3) Urticaria Papulosa; (4) Eczema of the Eyelid; and (5) Dysidrosis and Hyperidrosis. Dr. P. S. Abraham: Erythema Persistans, &c.

THE BATTLE OF THE CLUBS.—XXXI.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(Continued from p. 1389.)

DERBY: THE ABORTIVE MOVEMENT OF 1872; THE APATHY OF THE PROFESSION; FEMALE CANVASSERS.

IT must at once be acknowledged that my investigations in the town of Derby did not lead to any encouraging conclusions. My first visit was to Mr. Francis, President of the Derby Medical Society, which was formed some four years ago. It is quite different to other medical societies. The society has about sixty members. They meet for social and convivial purposes and also to discuss scientific papers; but, according to Mr. Francis, the society is in no wise prepared or anxious to take up economical questions. At the same time I should also state that I met with younger members of the profession at Derby who held more hopeful views. They had less knowledge of past and disappointing experiences. It appears that in 1872 a requisition was signed by a large number of practitioners at Derby demanding increased pay from the various friendly societies and medical aid associations established at Derby. The case, I am told, was badly put and failed to excite public sympathy. A number of meetings were held in private houses and were supposed to be private meetings. Nevertheless, there were always one or two medical men present, who went and reported all that had occurred to the committees of the friendly societies. The feeling of solidarity among the members of the profession, it will be seen, was very weak, but as this occurred twenty-four years ago the fact should not dishearten the men of to-day. Ethics have made great progress within the last quarter of a century. The selfish sense of individualism is dying out; the new word and the new teaching of solidarity is gaining a firmer hold on the public conscience, and people in all trades and professions are beginning to realise at once the material necessity of unionism. In 1872, however, all friendly societies were well prepared and able to resist the demands of the Derby medical men. They amalgamated and formed a United Friendly Societies' Dispensary. They not only refused to continue the pay of their medical officers, but introduced three new practitioners, to whom they paid fixed salaries and to whom they entrusted all their patients. Thus the dissatisfied medical officers not only failed to obtain an increase of pay, but lost what little they had. Mr. Francis, however, succeeded in keeping his lodges of Oddfellows, who now pay him about £200 a year in a 3*s.* 6*d.* annual subscription for each member. Mr. Francis seemed quite satisfied with the arrangement. During the course of twenty years no complaints had been lodged against him; he had not once been summoned to appear in self-defence before the committee. He was, if necessary, able to attend to any private patient who might happen to call at his house during the hours set aside for seeing club patients. To use his own words, he felt the coming in, but did not feel the going out—that is to say, if the number of members increased he felt the financial benefit, but the extra work this might entail was less perceptible. As for having too much work to do he thought that serious cases among the club patients were generally well treated. Undoubtedly there were some abuses. Rich men made political capital of having belonged for twenty-five years to a friendly society and having never drawn a penny, but they were careful not to state how much medicine and medical advice they had obtained from the friendly society's medical officer. On the other hand, these wealthy and superior men were generally members of the committees of the friendly societies. Being more intelligent than ordinary workmen they had the good sense to hear both sides when a question or complaint was raised. These wealthy and superior members of the friendly societies were really a protection to the medical officers and saved the latter from much needless and vexatious worry. Seeing the utter failure of the movement attempted in 1872 Mr. Francis was not at all desirous to resume the struggle even under the present more favourable conditions.

My next visit to a neighbouring practitioner was not more encouraging. In answer to my questions the medical man in question informed me that he received £4 or £5 per quarter from the London and Manchester Insurance Company and that their members and patients gave him very little trouble. Though the profession in the neighbouring town of Nottingham have risen in arms against this very same insurance company the Derby medical officer of the company declared that he was not even aware there was an agitation against them.

My third visit was to a consulting physician, and he certainly did speak in contemptuous terms of the medical men who, in different parts of the country, were employed at fixed salaries at the dispensaries established by these friendly societies. He thought it was a mistake to imagine that the men who accepted such posts were all young and inexperienced medical men. But was he to render himself unpopular with all the workmen of the town by refusing to meet in consultation the medical officers of the friendly societies' dispensary? Why should he be called upon to "bell the cat"? He agreed that the poor members of friendly societies were the most neglected and received the worst attendance. It was clear that a medical man who had club practice, but aimed at ultimately obtaining a private practice, would give himself much more trouble with regard to these club patients who were better off and could afford to become private paying patients when he left the club. Thus the club medical officers lent themselves to the establishment of a system of favouritism which told to the disadvantage of the poorer members of friendly societies. Surely this evidence should be taken to heart by the working-classes. It should make them understand how completely it is to their own advantage that a wage limit should be established and that medical attendance should not be given to wealthy members of benefit or friendly societies. On their side the members of the medical profession should realise how thoroughly the friendly societies reduce their medical officers to the level of mere paid servants, and that the medical aid they organise is established, not as a professional matter, but as a pure matter of business. This is fully set forth in Rule 19 defining the duties of the managing committee of the Derby Amalgamated Friendly Societies' Dispensary. The rule is as follows and I italicise the important passages: "The managing committee shall purchase all necessary drugs, instruments, surgical appliances, furniture, fixtures, books, forms, and other items *for carrying on the business of the Association*, and make such arrangements for the efficient and proper working of the dispensary as they may deem necessary." ..... "*They shall draw up agreements* for the due fulfilment of the duties of the medical officers and dispenser, and submit the same to the general committee for their approval and see that such agreements are properly carried out. They shall also have *power to suspend* a medical officer or dispenser for any misconduct or breach of agreement until such time as the matter of complaint has been laid before the general committee (which must be as early as possible after a complaint arises), when, if complaint be proved, the general committee shall have power to request the committee of management *to dismiss with or without notice* such medical officer or dispenser *for any misconduct or breach of agreement*, and if notice to resign be given, such notice shall be for one, two, or three months, as may be determined by the committee."

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Aug. 24th, 1895, Brussels; (2) Aug. 31st, 1895, Brussels; (3) Sept. 21st, 1895, Portsmouth; (4) Sept. 28th, 1895, Portsmouth; (5) Oct. 5th, 1895, Eastbourne; (6) Oct. 12th, 1895, Lincoln; (7) Oct. 26th, 1895, Lincoln; (8) Nov. 2nd, 1895, Grimsby; (9) Nov. 9th, 1895, Bexhill-on-Sea; (10) Nov. 16th, 1895, Hull; (11) Nov. 23rd, 1895, Hull; (12) Dec. 7th, 1895, York; (13) Dec. 14th, 1895, Northampton; (14) Dec. 21st, 1895, Fermanagh Medico-Ethical Association; (15) Dec. 28th, 1895, Northampton; (16) Jan. 4th, 1896, Birmingham; (17) Jan. 18th, 1896, Birmingham; (18) Jan. 25th, 1896, Club Practices in Rural and Mining Districts; (19) Feb. 1st, 1896, The Formation of a Provident Medical Association at Folkestone; (20) Feb. 8th, 1896, The Manchester Medical Guild and Medical Aid Associations; (21) Feb. 15th, 1896, The Leicester and Leicestershire Provident Dispensary; (22) Feb. 22nd, 1896, The Organisation of the Profession at Leicester; (23) March 7th, 1896, Loughborough: Local Efforts Defeated by Consultants from Neighbouring Towns; (24) March 14th, 1896, Medical Aid Societies in Small Heath; Medical Clubs at Stockport; (25) March 21st, 1896, General Meeting of the Profession and the Formation of a Union at Nottingham; (26) April 4th, 1896, Nottingham; the London and Manchester Industrial Assurance Company, Limited; the Public-house Medical Aid Clubs; United Action at Lincoln; (27) April 11th, 1896, Leicester and Wolverhampton; a Hastings Dispensary wound up; (28) April 25th, 1896, Walsall, Formation of a Medical Union; the Medical Profession and the Friendly Societies; Trade and Medicine; the Family Clubs; Women's Public-house Clubs; (29) May 9th, 1896, Sheffield: An Ancient Medical Society; Workmen Sweaters; The Old Grievances; Probable Formation of a Medical Union; (30) May 16th, 1896, Lincoln: Medical Protection Fund Started; Benefit Societies and Medical Men; Medical Union at Nottingham.

Such dispensaries are not only injurious in themselves to the interests of the medical profession; they compel medical men who try to start private dispensaries of their own to accept equally low terms. But such private dispensaries are slipping out of the hands of the profession, they are better organised, or rather more actively pushed by the canvassers in the employ of insurance companies. As agents canvass so actively for these companies, medical men who have private dispensaries of their own now also employ a canvasser, so that, as far as the dignity of the profession is concerned, it all amounts to much the same thing. I was assured that at Derby there are some private dispensaries where even girls are employed to collect and to canvass for subscriptions. So keen is the competition that members of medical aid associations or dispensaries are emboldened to make exorbitant demands on their medical officers. One club medical officer complained that he was compelled to give death certificates for nothing, though the Registrar who only copies the medical certificate is always paid for such copies.

There is also at Derby a sort of charitable provident dispensary, and at this institution, after the drug bill, the dispenser, and other expenses have been paid, there only remain 2s. per annum per member for the medical officers. It will be seen, therefore, that club practice at Derby stands at a very low ebb; but what is far more discouraging is the fact that at present no action is being taken to remedy these evils. Perhaps, however, when the Derby practitioners read what has been attempted and already achieved in many other towns they will awake from their present lethargy. In any case the younger members of the profession with whom I discussed the matter agreed that nothing but a strong union could save them from still further degradation. Unfortunately these younger men are not sufficiently influential to start the movement, and in the higher ranks of the profession there unfortunately at present prevails much apathy.

THE GAINSBOROUGH DISPENSARY.

It seems to be a generally recognised rule among the members of a certain class that workers of all kinds are entitled to full payment for what they do, except in the case of medical men. At the annual meeting of the Gainsborough Dispensary a "requisition" was read from the medical officers of the dispensary, and the following are the main points of the said requisition. In 1872 the remuneration of the medical officers was fixed at 66⅔ per cent. of the whole sum received by the dispensary. From 1884 to 1894 the sums received by the medical officers have varied between 50 and 57½ per cent., thus falling far below the remuneration fixed by the rules of the institution. Other sections of the requisition dealt with the boundaries of the district, the payments of members, fines, &c. It appears that the medical men attached to the dispensary who drew up the requisition held sundry meetings to consider it. They were all unanimous in its favour, and all signed it. Then arose the question what should be the course of action in the event of the Dispensary Committee refusing to accept the requisition, and according to our information they came to the conclusion that if the committee rejected it they would withdraw it. This seems to be a weak method of procedure. It savours too much of "These are my opinions, gentlemen, but if you don't like them I shall be happy to change them." The example of Cork shows what can be done by steady refusal to work for inadequate sums and by firm organisation. The tone of the Dispensary Committee was not of the best, witness the speech of one member, who, according to the *Retford and Gainsboro' News*, characterised the requisition as an "audacious solicitation" and also talked about "two new doctors." Despite the efforts of the chairman to secure a just and equitable settlement the requisition was withdrawn. Now, we have no knowledge of the circumstances other than we have procured from newspapers, &c., but if the medical men of Gainsborough want their bond they will have to fight for it. It is no possible use saying, "We want this, but if you say 'No' we won't ask again." A little firmness, a little unanimity, and the battle will be won.

LINCOLN MEDICAL PROTECTION FUND.

To the Editors of THE LANCET.

SIRS,—The following subscriptions have been received to the above fund since you so kindly published our appeal of the 16th inst.:—

	£	s.	d.
J. B. Neale, New Wandsworth	1	1	0
H. T. Butlin, Harley-street, W.	5	5	0
T. T. Blease, Altrincham	2	2	0
E. E. Llewellyn, Ramsey, Hunts	1	1	0
Portsmouth Medical Union	2	2	0
H. C. P. Howes, Lincoln	2	2	0
C. Arblaster, Madeley, Salop	0	10	6
H. P. and G. C. Taylor, Trowbridge, Wilts	3	3	0
F. Cassidi, Derby	1	1	0
H. Meadows, Leicester	1	0	0
C. H. Marriott, Leicester	2	2	0
R. H. Dawson, Saundby, Notts	1	1	0
Previous list	119	10	0

Two of the late officers of the medical clubs are now associated with the New Lincoln Provident Medical Association, whilst the third is at present engaged in *locum tenens* work. It is impossible as yet to estimate the amount that will be required for the purposes of the fund, but should the practical sympathy of the profession enable us to carry on for a few months we have every hope of an ultimate victory. Mr. C. Brook, Dr. C. Harrison, and Mr. G. Mitchinson, together with myself, have been appointed trustees for the fund.

I am, Sirs, yours truly,

Lincoln, May 26th, 1896. W. A. CARLINE, Hon. Treasurer.

"A DOCTORS' STRIKE."

To the Editors of THE LANCET.

SIRS,—May I, as a general practitioner, thank you and your Special Commissioner for the able and interesting way in which you are calling the attention of the medical profession to their present state of degradation? It appears that now is the time for us, as a body, to work out our salvation in this matter. The defeat of the profession at Lincoln and other places would clearly mean the subserviency of the profession to the medical aid associations and the absence of wage limit and the continuation of the present small rate of pay. I append a cutting from our local paper showing that in places medical men whose demands are reasonable suffer temporarily from our want of union. THE LANCET, since the days of its founder, has been the friend and journal of the general practitioner. I would suggest that you should:—

(*a*) Issue a circular to all medical men and students stating the principles contested—viz., (1) the establishment of a wage limit; (2) the abolition of paid canvassers and medical aid associations as at present constituted; and (3) the increase of rates of club pay—and asking them to subscribe to the same and join an association for the establishment of the same.

(*b*) Open a subscription list to help to carry out these objects. If every medical man in practice subscribed from one to three guineas, according to his means, you would have a fund of at least £20,000 to compensate those who may lose appointments and to enable those with little means to tide over their temporary embarrassment.

(*c*) Form a central and local committee to carry out the above objects. If your journal would undertake this it would earn the gratitude of all general practitioners and especially that class whose livelihood depends on club-work.

Yours faithfully,

May 23rd, 1896. CLUB DOCTOR.

[Cutting.]

A Doctors' Strike.

The medical men of —— and —— (near ——) recently gave notice to the friendly societies of the district that after next month they would not attend patients for 4*s.* a year as before, and also that they would not accept men earning 30*s.* a week as club patients. These demands are not assented to by the members, who are a numerous body, and the difficulty has been overcome by the appearance of a new resident medical practitioner, who has taken over the clubs on the old terms.

*** Our correspondent states very clearly the principles which are at issue in the present crisis of the profession in regard to club practice—(1) the establishment of a wage limit; (2) the abolition of canvassing and touting in all forms; and (3) the increase of rates of club pay. THE LANCET has sufficiently often published these points, so as to leave any member of the profession who disregards them or who takes the place of a medical officer who suffers for asserting them without excuse. It remains for the profession in each locality to apply principles so just and to organise club arrangements on the spot in which these principles shall be recognised. There remains the question

of the treatment of the "appearance of a new resident medical practitioner to take over the clubs on the old terms." The provision of a fund for indemnifying sufferers is worth consideration; but more is to be done by firm action and organisation.—ED. L.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Ladies' Charity and Lying-in Hospital.

THE medical staff of this charity have remained unaltered in their attitude. The epithets of "brutal" and "inhuman," which have been so freely bandied about, are now, I am glad to say, found to have been most unfairly bestowed on conduct that was the only possible course of action consistent with dignity.

Intramural Interments.

The report of the medical officer of health on intramural interments, issued at the request of the health committee of the City Council, contains some interesting reading. Dr. Hope says that interments under certain conditions are still permitted in eleven burial-grounds in Liverpool; upon the use of some of these the Home Office places certain restrictions. The numbers of applications to the medical officer of health for permission to inter in city graveyards, where such application is necessary, have during the last five years been respectively 64, 69, 42, 58, and 56. The largest number of interments appears to take place at the Necropolis, where notice is not required to be sent to the sanitary department, though occasional visits are made to it. At this burial-ground there is an arrangement of tiers, separated by a course of flagging and with brickwork between each coffin. The walls between the vaults are 4½ in. in thickness, and a stone flag covers over the top course of coffins about 2 ft. 6 in. below the surface of the ground. The vaults contain about thirty-six coffins. The approximate number of interments (not including "stillborns") which have taken place at this cemetery since it was opened is 82,341. The occupiers of houses abutting on this cemetery state that their houses are infested with mice of a peculiar light-fawn colour, which they believe come from it. Among other interesting matters Dr. Hope mentions that instances have come under his notice where municipal necessities have led to the absorption of parts of a city graveyard in which the remains of more human beings have been found beneath a single tombstone than the record on the tombstone indicated. He concludes his report by saying that "whilst the discontinuance of the practice of interment in burial-grounds situated in populous parts of the city cannot be otherwise than advantageous to the general public it need not be attended with any hardship to those immediately interested."

Hospital Saturday.

The annual street collection to supplement the weekly contributions made during the year in workshops, warehouses, and offices on behalf of the local hospitals took place on the 16th inst. Three hundred and fifty ladies, including many hospital nurses, devoted the whole day to the collection. No place where there was a chance of catching a copper was neglected by the fair and persistent mendicants. Particular attention was paid to the railway stations, the landing stage, and the flags of the Exchange. By means of their efforts over £500 were obtained. When this amount is added to the Fund resulting from the weekly collections made all the year round in the above-mentioned business places a goodly sum will be available for distribution to the local charities.

The City Hospitals and Police Ambulance.

A deputation from the representatives of the working men on the committee of the Hospital Saturday Fund recently waited on the Watch Committee of the City Council to urge the necessity of establishing a police horse ambulance corps as an auxiliary to the hospitals. The proposal was favourably entertained by the committee, who have instructed the head constable to report on the subject.

May 26th.

WESTERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Resignation of the President of the University College of South Wales and Monmouthshire.

AT a special meeting of the Court of Governors of the University College of South Wales and Monmouthshire held on May 13th a letter was read from the Dean of Llandaff resigning his position as president of the College on the ground that his medical adviser debarred him from the exertion which his appearance in public at the installation of the Prince of Wales as the first Chancellor of the Welsh University would involve and a motion which had been moved by the chairman asking Dean Vaughan to reconsider his decision was seconded, but upon a statement being made by the Dean's medical attendant in reference to his health and stating that the very greatest kindness that could be done was to accept the resignation, the chairman thought it would be cruel to proceed any further with his motion and he accordingly withdrew it. The Dean of Llandaff's resignation was, therefore, regretfully accepted.

Freedom of Bristol from Small-pox.

At the meeting of the Bristol sanitary authority held on May 21st the medical officer of health (Dr. D. S. Davies) reported that no case of small-pox had been notified since May 9th. There are only seven cases in hospital and all convalescent. No cases have been left at home. From inter-notification returns the outside districts also appear to be remarkably free. The only case to cause any anxiety is one in St. George, Gloucestershire, left at home, for though no doubt every care is being exercised, home-nursed cases are always a source of considerable danger, as shown in Gloucester, when the outpacing of the hospital accommodation promptly sent up the weekly returns from 70 or 80 to a maximum of over 200 per week.

The Annual Meeting of the Bristol Branch of the National Society for the Prevention of Cruelty to Children.

The annual meeting of this Society was held on May 20th, under the presidency of the Mayor. The report stated that during the past year the complaints of cruelty brought before this branch of the society numbered 304, and of these 286 were, upon investigation, found to be true. These involved 339 offenders, and affected the welfare of 468 children. The cruelties complained of included—exposure for begging purposes, &c., 22; ill treatment and assault, 57; neglect and starvation, 207. Of the children affected 33 were found to be insured for sums which in the aggregate amounted to £180. The 286 well-founded complaints were dealt with as follows—warned 225; prosecuted (of whom 58 were convicted and 3 discharged), 61. The majority of offenders were parents. The contributions received during the last year amounted to £567, being an advance of about £100 upon the sum raised in the corresponding period of 1894–95, and the accounts show a local surplus of £125.

Aberystwith College.

Having furnished the Government with the necessary certificate that the college authorities had raised the stipulated sum of £5000, the Registrar of the University College of Wales, Aberystwith, has just received a cheque for £5000, being the last instalment of the conditional grant of £10,000 promised by the Government.

Suggested Visit of the British Association to Bristol.

On May 18th an important deputation, representing the University College, Bristol, the Bristol Medical and Chirurgical Society, and the other scientific societies and institutions of Bristol waited upon the Mayor of that city and asked him to invite, in the name of the citizens, the British Association to visit Bristol in 1898. Professor Lloyd Morgan mentioned that the British Association had been in existence sixty-five years and had met in Bristol twice, in 1836 and 1875, and the feeling of the societies represented that day was that the time had come when Bristol should put in a claim to invite the Association to visit them a third time. The Mayor stated that he would be very pleased to further the invitation.

The South Wales University College.

A meeting was held at Bridgend on May 21st, under the presidency of the Earl of Dunraven, in support of the special building fund of £20,000 for the South Wales University

College. His lordship promised a donation of £400, and altogether a total of £680 was promised.

The Prevention of Floods in Bristol.

The Bristol Town Council has adopted the report of the Floods Committee, which recommended relief culverts for the prevention of flooding from the Cutler's Mills and Boiling Wells streams, the further improvement of the river Froom, and the erection of pumping machinery for accelerating the discharge of flood water from the harbour, the estimated cost for the various works being £90,000. It is stated that this scheme will deal with any rainfall similar to any that has ever occurred in Bristol, and consequently there ought not to be a recurrence of such floods as were recorded in THE LANCET of Nov. 20th, 1895.

Accident to a Medical Man.

On May 16th as Dr. Moynihan and his wife, of Northover, Ilchester, were driving home from Yeovil, the horse bolted, and both the occupants of the trap were thrown out. Dr. Moynihan fell with great violence upon his head. He was at once taken to the Yeovil Hospital, where it was found that he was suffering from a fractured skull, and it is feared that he will not recover. His wife sustained only a slight injury. Dr. and Mrs. Moynihan have only been married about a fortnight.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Dr. George Hare Philipson.

FOR twenty-eight years Dr. George Hare Philipson has occupied the post of physician to the Royal Infirmary in this city. The time has now arrived when by statute his services can no longer be retained as a visiting physician. Dr. Philipson has taken leave of his class and intimated to the weekly committee that the statute applies to him, so that there can be little doubt that a vacancy will be soon declared. It will be no easy task for anyone to succeed Dr. Philipson. There will be no difficulty in finding another physician, but for many years to come the gap made by his absence from the wards will be apparent to all acquainted with the working of the infirmary. Punctual, courteous, and kind, his example will be one worthy of imitation, difficult to equal, and impossible to improve upon.

Opening of a new Out-patient Department in connexion with the Hospital for Sick Children in Newcastle-on-Tyne.

The Hospital for Sick Children is situated on the Moor Edge, a considerable distance from the centre of the town. It is a very beautiful little hospital and was given to the town by the late Mr. Flemming, a wealthy solicitor. The out-patient department opened this week is in the centre of the town. It is the gift of Lord Armstrong as a memorial of the late Lady Armstrong. It was opened with a golden key by Mr. W. Cruddas, M.P., and the deeds were handed over to the Right Worshipful the Mayor on behalf of the trustees and governors of the charity. There is no more popular institution in Newcastle than the Hospital for Sick Children, and the work done there is great in amount and good in quality.

Annual Meeting of the Eye Infirmary, Newcastle.

The usual decorum, not to say dulness, of the annual meeting of this charity was somewhat departed from last week. The vicar of Newcastle occupied the chair, and there was a larger attendance of subscribers than is usual. Dr. Jeaffreson read the annual report, after which an attempt was made to alter the rules. At present the staff consists of two surgeons, one of whom has just resigned, so that there is a vacancy. It was sought to increase the number of surgeons from two to three and to allow any registered medical practitioner to be eligible for office. Under the existing rules it is necessary that a surgeon to the Eye Infirmary should be a Member or Fellow of one of the Royal Colleges of Surgeons. After a lively discussion it was determined that there should still be two surgeons and that Masters in Surgery should be eligible as well as Members and Fellows of the Colleges of Surgeons. There were five applicants for the post of surgeon, two of whom were ruled to be ineligible. From the other three—viz., Charles Lightfoot, M.D., M.C. Edin., M.R.C.S. Eng., T. G. Ouston, F.R.C.S. Eng., and A. S. Percival, M.A., M.B., B.C. Cantab., M.R.C.S. Eng.—a selection will be made by the special committee shortly. Much interest is taken in the appointment, which is certainly a very important one for this district.

The Heatherdene Convalescent Home, Harrogate.

This useful institution, in connexion with the Sunderland Infirmary, was opened in September, 1892, for women and children. In 1894 the foundation stone of a new wing for men was laid by Mrs. Laing of Sunderland. This wing has cost upwards of £4000, and last Wednesday it was declared open by Mr. Laing and to be free from debt. The building will now accommodate forty patients.

Thirty Years' Service as a Poor-law Medical Officer.

Mr. B. Maclaren has tendered his resignation of the post of Poor-law medical officer for Bedlington. On the motion of the Rev. and Hon. M. C. Ellis it was agreed to put on record an expression of the high opinion held by the board of Mr. Maclaren's thirty years' work and of regret at losing his services. The chairman said Mr. Maclaren had been a good officer against whom they had not had a single complaint.

A Pamphlet.

A pamphlet headed "Juvenile Depravity, a Tale of the Newcastle Workhouse in 1895," is being pretty extensively circulated here just now. It alludes to discreditable circumstances which lately occurred in the workhouse in connexion with which a man formerly the boys' board died suddenly while awaiting his trial. The pamphlet strongly suggests that a grave injustice has been done to an innocent man. However this may be, no one can read it without feeling very strongly indeed that the master of a large workhouse should be a properly paid educated man of better social standing than that from which masters are generally selected. The charge of a large workhouse with its sick, imbecile, aged, and juvenile inmates is an important one, quite as much as—most people would say more than—that of a governor of a gaol. It should certainly be occupied by men of as good position as those who are responsible for the custody of felons. Nine-tenths of the friction which arises from time to time in workhouse administration between the medical officer and the master would undoubtedly cease to arise if the master were a man of better social standing.

Newcastle-on-Tyne, May 25th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Opening of the University Athletic Field.

ON Saturday of last week the new athletic field for the University of Edinburgh was formally opened by the Lord High Commissioner. Much interest was evinced in a cricket match between the University eleven and the staff of the Royal Infirmary. The former played with broomsticks. The Infirmary team included Mr. Chiene, Dr. Bramwell, Mr. Cotterill, Mr. Cathcart, and others, most of whom had not touched a bat for years. The University eleven won, and several of the Infirmary eleven experienced the following day the discomforts consequent upon unusual exertion. The ceremony and the match were, however, regarded as having been most successful.

The Lord High Commissioner.

As is usual when Her Majesty's representative is at Holyrood the Royal colleges and other important bodies have during the present week paid their respects to him. He and Lady Tweeddale have on their side visited the Infirmary and other institutions, at all of which they were gladly received, their visit always being a source of interest and pleasure to the patients.

May 26th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Unfounded Charge against a Medical Man.

ON the 26th inst. in the Northern Dublin Police-court Mr. Frederick P. Smith of Kevit Castle, Crossdoney, county Cavan, was charged before Mr. Keys, Q.C., with having feloniously assaulted a servant girl at Wellington-place, Clyde-road, between nine and ten o'clock on last Thursday night. According to the girl's statement she left the festival

at Ball's Bridge at about nine o'clock and went towards her master's house. In Wellington-place she was attacked by two men, one of whom held her down while the other ravished her. On Monday—that is, four days after the occurrence—she went to Cyclopia with a policeman and identified the accused. Mr. Drummond, Q.C., stated that the accused was a medical man, having been qualified for about a year, that having by the death of a relative come in for some property in the county Cavan he had ceased to practise his profession, and, finally, that he (the learned counsel) would prove beyond the shadow of a doubt that the case was one of mistaken identity. Mrs. Saunderson (the wife of Colonel Saunderson, M.P.), in answer to Mr. Drummond, deposed that she was in charge of the Cavan stall at Cyclopia, Mr. Smith being one of her assistants, and that he was present at the bazaar between nine and ten o'clock on Thursday night. The witness, moreover, asserted, in reference to the girl's statement that the person whom she accused was dressed in light tweed, that Mr. Smith wore a suit of black. Mr. Edward Saunderson (the son of the last witness) deposed that Mr. Smith was in the stall with him during practically all the evening until it closed. Mr. R. W. Reeves stated that he was a deputy-lieutenant for the county Clare and that he was assisting at the county Clare stall, which was situated close to the Cavan stall, and that he saw Mr. Smith preparing to close up the Cavan stall at half-past nine on Thursday night. The defendant, Mr. Smith, was then called, and stated that on Thursday he was at the bazaar from two until after eleven o'clock. Some other witnesses were also examined, after which Mr. Drummond said that it was plain as daylight that the case was one of mistaken identity. Mr. Keys at once concurred, stating that he looked upon it as a case of mistaken identity and that he would dismiss it. Mr. Smith after leaving the dock was warmly congratulated by a large crowd of sympathising friends.

The Inquiry at the North Dublin Union.

At the last meeting of the board a resolution was adopted asking the Local Government Board to hold a sworn inquiry in reference to the allegations contained in a letter from Mr. Kennedy as to the management and discipline of the house.

Downpatrick Water-Supply.

A public meeting of the Downpatrick ratepayers was held on May 18th at which a resolution was adopted protesting against the unsatisfactory and deplorable state of the Downpatrick water-supply and works and the delay on the part of the board of guardians in dealing with the matter. It was stated that a tax of over £500 annually is being paid for which the inhabitants received practically no equivalent. A strong resolution was passed condemning the board of guardians for their indifference and incompetence in the exercise of their sanitary powers, and pressing the Local Government Board, in the interest of the ratepayers and to prevent indefinite waste of time and money, to take the conduct of the matter entirely out of the hands of the board of guardians or compel them to proceed without delay to remedy the defects in the works. An influential committee was appointed to look after the interests of the ratepayers in the matter of the water-supply.

The Ulster Eye, Ear, and Throat Hospital.

The foundation-stone of the new wing to be added to this hospital was laid on May 20th by Miss Benn and the Lady Mayoress of Belfast. This new part of the building will contain five small wards, two bath-rooms and closets, and a spacious operating-room. The present hospital was opened in 1871, a quarter of a century ago. In the next year Mr. Edward Benn (brother of one of the ladies who laid the foundation-stone) offered to build a new hospital, which he did at a cost of over £3000, and it was opened in 1874. His brother, Mr. George Benn, gave during his lifetime £1000 to endow the hospital and also in his will bequeathed a similar sum for the same purpose. In the working of the hospital it was soon seen that additional accommodation was needed for day-rooms, operating-theatre, bath-rooms &c., wards, and laundry. The laundry, bath-rooms &c., and two day-rooms in, or connected with, the old building are completed and it is expected the rest of the extension will soon be ready. When finished the new Ulster Eye, Ear, and Throat Hospital will be complete in every respect.

Opening of County Monaghan Infirmary.

On Friday, May 22nd, his Excellency Earl Cadogan, Lord-Lieutenant of Ireland, who has been paying a visit to Lord Rossmore, performed the opening ceremony of the new county infirmary in the town of Monaghan, a place which was once represented by an ancestor of Earl Cadogan. The old infirmary, built in 1768, was for a long time found to be in every respect unsuitable, and when the grand jury put up the old county prison for sale the board of governors of the infirmary bought it for £550. The southern portion of this building has been altered and transformed into a hospital at a cost of about £2000, the money for this purpose being raised by a bazaar. There are seventy beds in this new infirmary. One of the wards was named after the present surgeon to the hospital—Dr. J. Campbell Hall—by the governors in appreciation of his services to bring the new arrangements to a successful issue. Mrs. and Miss Murray-Ker have given £250 to furnish two wards, another gentleman has furnished another, while a fifth ward has been named the "Young Ward," in memory of Mr. A. K. Young, who was for fifty-three years surgeon to the institution and who was one of the best-known medical men in Ulster. The Lord-Lieutenant was most enthusiastically received at the infirmary and was presented with an address. He declared the new hospital opened.

The Proposed New County Derry Asylum.

While in Belfast the coroner and others are doing all they can to prevent lunatics from being sent from the asylum to the workhouse in County Derry, the greatest opposition is being shown to the proposed enlargement of the asylum. It is admited that more accommodation is needed, but the great majority of the ratepayers think plenty of room can be found in the empty workhouses, and thus a large expenditure can be avoided. On May 23rd a most influential meeting was held in Coleraine, and resolutions were carried to the effect that the present was a most inopportune time to further burden the ratepayers of the county by throwing upon them the increased taxation arising from the building of a new asylum. This, it was said, would cost £120,000, and, owing to the present depressed state of agriculture, it was argued that it would be wiser to postpone the whole matter for the present. It is admitted on all hands that the present asylum is overcrowded, but it is thought the proposed legislation dealing with the amalgamation of unions (which must soon come) will solve the difficulty. Coleraine Union can accommodate 1000 inmates, while at present it has only 120; Limavady Workhouse was built for 800 or 900 inmates, while, as a rule, there are only 100 paupers in residence. Hence there is accommodation vastly in excess of what is needed, and if they were amalgamated one of these large workhouses would be empty and it could be utilised as an auxiliary asylum, and so the taxpayers would be saved the enormous expense of £120,000. Great dissatisfaction is also felt in the constitution of the board of governors of the County Derry Asylum, as out of twenty-three governors only three, it is said, really represent the county, the remainder having their interests centred in the city of Derry. The resolutions passed at the meeting are to be sent to the Lord-Lieutenant, the Chief Secretary, and the Board of Control of Asylums. Opposition to the enlargement of the asylum is being organised all over County Derry.

Museum for Londonderry.

An effort is at present being made to establish a museum in the historic city of Derry, and it is suggested that Gynn's Institution might be let for the purpose of a museum at a nominal rent. There is a nucleus of a museum, which was some time ago handed over to Mr. Bernard, and at present the articles are being arranged in suitable cases. They are chiefly minerals. Moreover several local gentlemen have private collections which would probably be forthcoming if a suitable habitation was obtained. Mr. Bernard, whose stock of relics and curios is a most valuable one, has expressed his willingness to hand them over to a local museum, and Sir J. A. MacCullagh, M.D. Dub., has also a series of relics specially associated with the past history of Derry. It is hoped a building will soon be set apart for the museum.

Belfast Royal Hospital.

At the quarterly meeting held on May 25th it was reported that 462 intern and 5733 extern patients had been treated during the past quarter. To the end of the quarter the expenditure has been £5940 14*s.* 5*d.*, and the receipts £5441 4*s.* 6*d.*; the expenditure has, therefore, exceeded the income by £499 9*s.* 11*d.*, but as a bequest of £500 is not available (without the sanction of the corporation) the expenditure exceeds the ordinary income by £999 9*s.* 11*d*, which,

adding the debt of last year (£142 4s. 10d.), shows a balance against the hospital of £1141 14s. 9d.

May 26th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Cocaine v. Guaiacol.

A FEW months ago MM. Lucas-Championnière and André vaunted the superiority of guaiacol over cocaine as a local anæsthetic, claiming that, employed in the form of subcutaneous injections, it conferred greater analgesia than the better-known cocaine. M. Reclus[1] now takes up the cudgels for his favourite anæsthetic after a fair comparative trial of the rival drugs. Eliminating those cases where (owing, perhaps, to defective technique) sphacelus ensued, and another where (owing, perhaps, to idiosyncrasy on the part of the subject) analgesia was nearly *nil*, he tells us that he has employed guaiacol in the following operations. Circumcision: six centigrammes injected; incision seven minutes later with violent pain. Cocaine (three centigrammes) then injected; pain *nil*. Resection of saphenous vein: half of the field of operation anæsthetised with guaiacol and half with cocaine; freedom from pain only in the cocainised area. The same results occurred in a case of radical cure of hydrocele and in one of castration. As for the dangers of cocaine, M. Reclus once more states that observance of the following fundamental rules suffices to avoid them. Use only a 1 per cent. solution and never inject more than twenty centigrammes, a less quantity almost always being ample. The patient must be lying down, and the piston of the syringe must be pushed progressively as the needle enters in order to avoid the introduction of a large quantity of the drug into a vein that may be pierced. The patient remains on his back for an hour or two after the operation and must eat something before he rises. With these precautions M. Reclus has thus practised 3500 operations without the slighest accident either during or after the operation. With a hypodermic dose of ten centigrammes he has done the radical cure of hernia, and with fifteen centigrammes a castration. He concludes that cocaine should be preferred whenever the incision is not too long, and that its superiority over guaiacol is an established fact.

Chronic Glaucoma: its Varieties and their Treatment.

M. Abadie[2] states that there are two varieties of chronic glaucoma. In one the symptoms are intermittent. The patient says he sees occasionally iridised circles around flames, vision is dulled and confused for a few hours, and then becomes normal. This form may be advantageously treated by iridectomy, which is, however, useless in the second form, where the progression of the morbid process and symptoms is uniformly slow, silent, and continued, revealing itself only by an increasing loss of sight corresponding with the proportional elevation of the intraocular tension. In this kind of glaucoma, which is perhaps the more common and which affects both eyes consecutively, neither iridectomy nor repeated sclerotomy is of the slightest use, the only benefit accruing being at best a temporary lowering of the tension and a consequent remission. But M. Abadie informs us that there exists a form of treatment which is efficacious in this hitherto incurable disease. Commence first with the administration of potassium bromide and sulphate of quinine in daily doses of one or two grammes and half a gramme respectively. Locally instil each day two drops of a ½ per cent. solution of eserine. As soon as the tension has become normal leave off gradually the bromide and the quinine, but continue indefinitely the instillations, the solution of eserine being carefully sterilised so as not to irritate the conjunctiva.

A Practical Gift.

Dr. Brouardel, the Dean of the Paris Faculty, has received from M. Lépine, the Prefect of Police, and some of his friends a subvention of 2000 francs to pay the expenses of the initiation of students who have completed their curriculum and junior practitioners into the diagnosis and therapeutics of diphtheria (bacteriology, sero-therapy, and intubation). Such a gratuitous post-graduate course will doubtless prove most useful to students who have not enjoyed the advantages of the *internat*.

[1] Académie de Médecine, May 19th, 1896.
[2] Société Française d'Ophtalmologie, Congress, May 7th.

Commercial Currant Jelly.

At a recent meeting of the Société Française d'Hygiène M. Tison revealed the real composition of a product consumed by the ingenuous Parisian as currant jelly. It is simply agar-agar coloured and flavoured with certain essences which confer on it the appearance and the taste of fruit. Strange as it may appear, the authorities refuse to prosecute the sellers of this article, provided it be labeled *gelée groseillée*, their contention being that its consumption is not injurious to health. I suppose this is one of the advantages civilisation and nineteenth century chemical progress bring in their train.

May 26th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

For the Prisoners of War and the Maimed.

IT is necessary to go back to the French disaster at Moscow in 1813 for something like a parallel to the miseries and humiliations brought upon Italy by her invasion of Abyssinia. Discomfiture on the battle-field she has had to endure; but the suffering and the torture it has entailed have tested her moral courage still more. Her wounded soldiery now under treatment in her hospitals are perhaps the best off among her victims of the war. Would that she could persuade herself that her sons, now captives in Abyssinian keepin , were equally well cared for. These are estimated to amount to some 5000; many of them are wounded, all of the m feel the privations of a prisoner's life under semi-barbarous conditions, and, to add to their misery, there is the torturing conviction that their families in the mother-land are still in agonies of suspense as to whether they are dead or alive, well or ill, whole or mutilated. But Italy has proved equal to the demand on her head and heart in this crucial moment; and certainly her energy and self-sacrifice go far to reassure her foreign friends as to her future rehabilitation and prosperity. Beginning with the King the subscribers to the fund in aid of the prisoners embrace all classes and all creeds, religious and political. The committee, whose president is the ex-War Minister, General Mezzacapo, has up to this collected 700,000 lire (£28,000). Count Rinaldo Taverna, representing the Red Cross and its workers in the same cause, has just added 300,000 lire (£12,000) to the 1,000,000 lire (£40,000) previously contributed. The leading journals throughout the kingdom are so many centres for subscriptions which come from the poorest villages as well as the richest towns; while the colonies, chief among which is the Argentine Republic, have already sent in over 300,000 lire. Great Britain has a considerable Italian population, which has also responded nobly; and the ladies of Italy, headed by one of the *grandes dames* of the Court (the Countess Sforzá di Santafiora), have conceived the project of sending to South Abyssinia an eminent ecclesiastic, charged with comforts of every kind for the captives. A similar initiative has been taken by Count Costantino Wersowitz-Bey, a Bohemian by birth, but a warm sympathiser with Italy. With a few companions he starts immediately for Obock, whence in thirty-eight days he will reach Antoto. There he expects to find King Menelik, to whom he carries the most authoritative credentials and whose good offices in behalf of the prisoners he is more than likely to conciliate. Among his *impedimenta* are many bales of linen, chests containing clothes, medicines, and creature-comforts of all kinds. More acceptable than any of these, he bears a huge trunk filled with letters from dear ones at home, letters which if they reach those to whom they are addressed will prove the best of restoratives to many a yearning heart. The Count, I may add, is reinforced by the Vatican, and embarks on his mission with the Apostolic benediction and the substantial aid of the dignitaries of the Roman Catholic Church from the supreme Pontiff downwards. Nor is it only for the relief of her own sons that Italy is now straining her resources, moral and material. The poor Ascars, those native troops who fought so well for her at Abba Carima, claim her warmest solicitude—many of them maimed in the most horrible manner by the more savage of King Menelik's soldiery. She has in this department of her relief operations the countenance of the "Arms and Legs Charity," whose headquarters are in this city—a charity started about seventeen years ago by the late General H. H. Maxwell, C.B.,

to whose nobly philanthropic life a touching tribute was paid in THE LANCET of June 4th, 1892. Signor Invernizzi, himself a skilled mechanician and reproducer of the "Beaufort limb," which formed the basis of General Maxwell's charity, has just come back from Massowah reporting on the success with which the poor Ascari have been rehabilitated by the "limb" (an arm or a leg) in question, and strongly advising the Italian Government to adopt the Beaufort system for those of them (300 mutilated ones) who have had to be sent back. Signor Invernizzi has himself, on whose initiative I know not, started a small workshop at Massowah for the manufacture of the Beaufort limb; while to meet the demand in Italy herself the "Arms and Legs Charity" is placing at the disposal of the War Office a certain number of limbs, primarily for those mained soldiers who are of Roman birth or parentage. Amid much that is humiliating to Italy in this disastrous Abyssinian enterprise, the courage, the energy, and the intelligence with which she is retrieving so many of its most tragic sequelæ are in the highest degree reassuring. In rehabilitating its victims she is, in no insignificant fashion, rehabilitating herself.

Cholera on the March.

Our Adriatic and Mediterranean seaports are yielding to panic in view of a cholera invasion. For this overcharged state of public feeling the arrivals from Alexandria are responsible. In that city the European mortality from the disease is said to be thirty-five out of every forty—a mortality still higher among the Arab population, which does not report the cases to the sanitary authorities for fear that the religious rites due to the dead might be officially interdicted. To counteract this motive for reticence the agents of the medical committee exercising surveillance over the districts into which Alexandria is divided are entitled to 10 fr. for every *bonâ-fide* case they report. What accelerated the stampede, and caused the various steamboat services—Lloyd's, the Messageries, the Navigazione Generale, and the Società Russa—to increase the number of boats calling at Alexandria, was the spread of the disease from the lower to the higher strata of society, the rapidly fatal case of the Baroness Richthofen, wife of the German Commissary serving on the Débit Publique, having made a profound and wide impression. Within a few hours of it becoming known all the homeward bound steamers were taken by assault, the fugitives not even inquiring to what port they were destined. This, as I have said, has sufficed to fill the Adriatic and Mediterranean harbour cities with alarm amounting to panic. Fortunately the Public Health Department has, this time at least, proved alive to the danger, and, as already stated, has, since February last, been both vigilant and active in its precautionary measures.

May 24th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Diseases of the Vena Cava Inferior.

A HIGHLY interesting lecture on Diseases of the Vena Cava Inferior has been delivered by Dr. Schlesinger at a meeting of the Medical Club, in which, after having enumerated the cardinal symptoms, such as œdema of both lower extremities and formation of a typical venous circulation, he referred to those cases in which the disease presents no symptoms and is only ascertained on post-mortem examination. Instances not uncommonly occur where œdema is observed on only one side; the thrombus may be produced by the occlusion of one of the iliac veins and the blood from the lower extremity of the opposite side makes its way to the heart partly by the vena cava and partly by the collateral veins. In these cases of unilateral œdema a diagnosis may be made by an examination of the collateral circulation, for if there are enlarged veins on both sides towards the armpit and the sternum the disease is situated at a point on the cardiac side of the junction of the iliac veins. Among other symptoms Dr. Schlesinger mentioned intumescence of the abdomen up to the costal arch, the occurrence of blood and albumin in the urine, catarrhal diseases of the stomach, bleeding from the intestine, and unilateral varicocele.

The Sense of Taste.

In the Physiological Society Dr. Frankl described last week his experiments on animals whose lingual nerve had been resected. He considered that this nerve contains gustatory fibres for the anterior two-thirds of the tongue and fibres passing into the chorda tympani, the gustatory function of which was discovered long ago, although the method by which the sensations arrive at the brain was unknown. Dr. Frankl believed that they pass with the fifth nerve, for after the resection of Gasser's ganglion ageusia of the anterior part of the tongue is established. It has, however, not yet been satisfactorily ascertained whether these fibres are in the second or the third branch; but there are cases in which the sense of taste does not disappear after a lesion of the fifth nerve, and without doubt in these cases the ninth nerve contains fibres for the whole tongue. Section of the glosso-pharyngeal nerve causes atrophy of the gustatory cuplets in the papillæ circumvallatæ, whereas section of the lingual nerve produces atrophy in the anterior part of the tongue.

The Mobility of Abdominal Tumours.

Professor Nothnagel has just published a pamphlet in which he states that the mobility of abdominal tumours is one of their most important physical qualities. Their change of position may be due to the respiratory movement of the diaphragm, to the peristaltic motion of the intestines, to pressure from without, and to their own weight. The organs being below the diaphragm sink downwards with inspiration and rise again during every expiration. In making a differential diagnosis between a tumour of the liver and one of the stomach the possibility of retaining it fixed during expiration points to a tumour of the liver. There is no respiratory mobility of the tumour in pleurisy or emphysema, or in cases of enlarged liver or spleen, conditions by which the contraction of the diaphragm is hindered. The normal liver may also be displaced in the inferior right abdominal region and by palpation may be again restored to its original situation; but it may, on the other hand, be fixed by peritoneal adhesions, so that the immobility of an abdominal tumour is no argument against the existence of displacement of the liver, spleen, or kidney. Tumours of the intestines also show mobility in a high degree, a circumstance which is of great importance in cases where a diagnosis has to be made between new growths and paratyphlitic exudation. Abscesses, aneurysms, and tumours of the pancreas and the retro-peritoneal glands have no mobility.

Pathology of Death from Burns.

Dr. Spiegler has described in the *Medicinische Wochenschrift* the experiments made by him with the view of determining the nature of the virus which is produced in cases of burning and to which the fatal result is directly attributable. He heated the skin of a dead body on copper plates in the hope of obtaining toxic bodies from the burnt skin, but neither the extract nor the distillate had any influence on rabbits. Some years ago Dr. Lustgarten supposed this virus to belong to the group of muscarines, and he was encouraged herein by the fact that a patient suffering from serious burns recovered after an injection of atropine; but, on the other hand, Dr. Spiegler believed that a virus is formed by a disintegration of the albuminous matters in the blood, and he has observed in it numerous particles which are fragments of blood corpuscles. These act as foreign bodies and from them a toxic substance is formed which causes such symptoms as vomiting, spasms, anuria, increased specific gravity of the blood (1065 to 1072), and parenchymatous degeneration.

Mortality in Austria.

The Statistical Commission has just published a report on the death-rates during 1895 in fifty-six of the largest Austrian towns having an aggregate population of 3,536,194 persons. The highest death-rates were registered in Teschen (3·67 per cent.), Prossnitz (3·56 per cent.), Cracow (3·43 per cent.), Stry (3·29 per cent.), and Prague (3·28 per cent.), while the lowest (1·22 per cent.) was in Weinberge. Among each 10,000 of the population there died from small-pox—in Vienna 0·1, in Stanislau 0·9, in Lemberg 1·4, and in Tarnow 6·3; from measles—in Vienna 5·1, in Laibach 11·2, and in Trieste 0·1; from scarlet fever—in Prague 0·3, in Cracow 12·9, in Vienna 3, and in Asch 36·4; from enteric fever—in Tarnopol 7·5, in Lemberg 6·3, in Prague 5·9, in Brünn 3·1, in Salzburg 2·4, in Linz 1·1, in Innsbruck, 0·8, and in Budweis 0·3; from diphtheria—in Marburg 29·7, in Laibach 21·7, in Czernowitz 15·4, in Cracow 12·7, in Linz 9·8, in Brünn 8·2, in Vienna 4·6, in Troppau 3·8, in Salzburg 1·6, and in Karolinenthal 0·5; from phthisis—in Vienna 46·6, in Teschen 73·5, and in Asch 16·7.

May 17th.

PHILADELPHIA.

(FROM OUR OWN CORRESPONDENT.)

Illiterate Immigration.

SOME action is imperatively demanded to check the flood of undesirable immigration. Various measures have been proposed, chief among them being the Stone Bill and the Bartholdt Bill. The former requires consular certification. Each immigrant must under this ruling procure a certificate from a United States Consul, showing that he does not belong to any of the prohibited classes. This would necessitate an increase in the consular service, with a corresponding increased expenditure on the part of the United States. In most cases the Consuls would be dependent on the local government for information relative to the eligibility of the applicant for a certificate, and this is probably the most vulnerable point of the measure. It would be a temptation to the local government to facilitate the departure of the worst element, especially the criminal class, while it would be practically impossible for the young, vigorous, and most desirable class to obtain the necessary certificate. It is likely, too, that efforts at substitution would be made or that the tickets might be bought and sold. The Immigration Restriction League regards the Bartholdt Bill as the most practical. This, known also as the educational test, requires that all male immigrants shall be able to read and write one language. All males between sixteen and sixty years of age unable to comply with this ruling are debarred admission to the country. Parents of persons already residents of the States are exempted, thereby avoiding the separation of families. One powerful argument adduced in favour of this measure is that the steamship companies, knowing ineligible persons will be refused admission to the country, will apply the test themselves, hence preventing their embarkation. This will prevent expenditure on the part of the United States and will spare many a poor soul trouble, expense, and in the end nothing but bitter disappointment. During 1895 about 37,000 people came from Italy. During the first quarter of the present year nearly 20,000 Italian immigrants landed in the United States. It is safe to say that the large majority of them are leaving in order to escape military duty and that very few are actuated by a love for this country. They are not the only undesirable element—Russia, Poland, and Austria-Hungary contribute a large share. These people as a class are illiterate, about 90 per cent. know no trade, and the majority have less than $5 to their name. Since they never readily form a part of the composite American such increments are obviously undesirable. In the case of the Italians, the theory that immigrants seek that part of the country of their adoption whose climatic conditions most nearly approach their native clime does not hold good, for fully 70 per cent. of them settle in New York City or State, a few only go to the South or West, and the balance locate themselves in some of the Eastern States. It is hoped that the Educational Test Bill will successfully close our portals against unworthy immigrants, though they shall ever be opened wide to the intelligent and industrious of any nationality.

Convention of Military Surgeons.

The sixth annual convention of the Association of Military Surgeons of the United States was held in this city on May 12th, 13th, and 14th. Addresses of welcome were delivered by Governor Hastings, who represented the State; by Mayor Warwick, for the city; by Major-General Snowden, on behalf of the National Guard of Pennsylvania; and by Dr. J. M. Da Costa, for the medical profession. The following are some of the topics discussed:—Instruction of the Hospital Corps, by Dr. C. H. Olden, Assistant Surgeon-General, U.S.A.; the Hospital Corps of the National Guard, by Major D. A. Kuyk, First Regiment, Virginia National Guard; Surgeon-General Senn, of the Illinois National Guard, presented a few remarks on a New Bullet Forceps which he had devised for the extraction of the new style of bullets. The proceedings of the second day were held at the University of Pennsylvania. Dr. J. Wm. White, in a clinic at the University Hospital, demonstrated the value of Roentgen rays in surgery. An interesting paper was read by Passed Assistant Surgeon Craig, U.S.A., on the Vitality of the Cholera Spirillum in its Relation to Certain Acid Fruits. A number of experiments were performed to determine the length of time cholera spirilli will live after implantation upon the cut surface of fruits. Cultures were made upon apricots, apples, banana, strawberry, orange, peach, lemon, and melons. It was found that lemon was the most, and water-melon the least, fatal to the germ. On the former fruit five minutes' exposure sufficed to kill them, while they could live several weeks on the melon. A paper on the French Field Sanitary Service and what may be Learned Therefrom was read by Major Havard, Surgeon, U.S.A. At the final session a paper written by Major Paul Brown, entitled "Determination of the Personal Identity of the United States Soldier," was presented. He recommended the introduction of the Bertillon system of measurement as the only reliable means of identification of soldiers. It is used in the French Army. While it has been the practice in this country to record descriptive data of each recruit who enters the army, its use at any future time for the purpose of establishing his personal identity is of questionable value. He said the Bertillon system would be useful in those cases in which an application for a pension is made. The election resulted in the appointment of Medical Director Albert L. Gihon, U.S.A., to the presidency for the ensuing year.

A Case of Prolonged Hypnosis.

A case of prolonged hypnosis, somewhat similar to the one recently on exhibition in London and commented upon in the columns of THE LANCET, is reported from Fort Wayne, Indiana. Santanelli, a professional hypnotiser, put a man to sleep. He is to remain in that state for a week, neither eating nor drinking, constantly being watched by medical students, who will hourly record the temperature, pulse, and respiration. The Humane Society took the matter up and charged Santanelli with assault. He was taken before the justice's court and fined. He refused to awaken his subject and has appealed his case to a higher court.

Chicago: Right of Way granted to Physicians in cases of Obstruction to Traffic.

Some time ago the Chicago Council passed an ordinance granting the physicians the right of way in the streets and over bridges, ahead of processions, parades, fire lines, and other obstructions to ordinary traffic. Upon application and payment of fifty cents the physician is furnished with a special permit and badge. These secure for him the privileges of the ordinance. Ambulances are also given the right of way.

The Diagnosis of Pregnancy by Microscopical Changes in the Urine.

At a meeting of the North-West Medical Society of this city, held in April, Dr. Parkes read a paper with the above title. He spoke of various changes said to take place in the urine of pregnant women, including the kiestine pellicle, upon which at one time a great deal of stress was laid, but which has since been shown to be present in the urine of virgins and even in that of men. He then referred to an investigation pursued by a physician of one of the southern states, who claims to be able to diagnose pregnancy ten days after conception. His method is to add a few drops of the following alkaline solution—viz., ammoniæ murias, aqua ammoniæ, magnesiæ sulphas, of each two parts; aqua, eight parts—to 10 c.c. of urine. This precipitates triple phosphate crystals of the feathery variety. In urine generally these are found in beautiful fern-like or feathery forms, but in the urine of pregnant women they will be found distorted and fractured. Dr. Parkes has examined the urine of more than fifty women, and while he rightly considers the number too small to permit him to make an asseveration he feels that the subject is worthy of further attention. Should it fulfil the claims made for it it would certainly be the most valuable diagnostic sign of early pregnancy; in fact, the only sign.

May 15th.

Obituary.

THOMAS CHARLES STEUART CORRY, M.D. ABERD., M.R.C.S. ENG., L.R.C.P. EDIN.

ANOTHER of the older of the Belfast practitioners, Dr. T. C. S. Corry, has passed away in his seventy-first year. Dr. Corry, who had been in declining health for some years, died on May 20th at his residence, Belfast, to which he had been confined for the past six months. Dr. Corry was the eldest son of Mr. T. C. S. Corry, D.L., of Rockcorry Castle,

county Monaghan, where he was born. He studied at the old Belfast Medical School, became M.R.C.S. Eng. in 1846, M.D. Aberd. in 1856, and L.R.C.P. Edin. in 1859. His whole professional life was spent in Belfast, where for a time he was dispensary medical officer during the great cholera epidemic which visited that city about half a century ago. For about twenty-five years he was a member of the board of guardians and only retired in last March. At the end of last year he attained his jubilee as a medical practitioner, when he was presented with an address and testimonial by his friends. Dr. Corry wrote "A Guide to the Scenery and Antiquities of Ireland," which has passed through eight editions; and he was the proprietor of two dioramas of Irish scenery. He also wrote a book of "Irish Lyrics" and "Poems, Sketches," &c. Dr. Corry was a great favourite with the poor, who valued his advice and kindly manner. His funeral was private, but a large number of personal friends attended it.

SURGEON-MAJOR FREDERICK DUCKWORTH, M.D. ST. AND.

AT his residence, Cardiff Castle, Cleveland Town, Bangalore, there died, on the morning of April 28th last, Surgeon-Major F. Duckworth, M.D. (retired list), I.M.S. The deceased gentleman was aged sixty-three years and seven months. He was taken ill about three months previously with Bright's disease, but later he improved. However, a sudden change for the worse taking place, he succumbed despite all that medical aid could do. In 1849 Surgeon-Major Duckworth, at the age of seventeen, commenced his studies at the Madras Medical College. After passing out he was promoted to the rank of assistant apothecary in 1853, and while in that capacity in 1858 he served in the Indian Mutiny, when he was under the orders of Sir Colin Campbell during the siege and capture of Lucknow, for which he received the medal and clasp. In September, 1859, he resigned the Subordinate Medical Service and proceeded to London and thence to Scotland, where, in May, 1860, he took his degree of M.D. in the St. Andrews University. Returning to London in July, 1860, he successfully competed for and obtained a commission in Her Majesty's Indian Medical Service. In May, 1861, he returned to Madras and commenced service as an assistant surgeon. When at Tranquebar in the year 1867, while holding the appointment of civil surgeon and deputy magistrate, he, in conjunction with Mr. Crole of the Indian Civil Service, succeeded in establishing a civil dispensary, known as the Porya Dispensary, by voluntary subscriptions. By this means a sufficient sum of money was raised for the purpose, and the interest accruing therefrom rendered the institution self-supporting, and it stands to this day. In October, 1872, he was promoted to the rank of Surgeon-Major, and in August, 1878, after a meritorious service of twenty-five years in all, he retired on a pension. Since his retirement he had resided in Bangalore. He was the founder of the Duckworth Settlement of the English and Anglo-Indian Colonies and was Vice-President of the Mysore Branch of the British Medical Association. He leaves a widow and a family of five sons and two daughters. His remains were interred in the St. John's Hill Protestant Cemetery.

MEDICAL MAGISTRATE.—Mr. Neville Williams, M.A., M.B. Cantab., M.R.C.S. Eng., has been placed on the commission of the Peace for the borough of Harrogate.

VICTORIA HOSPITAL FOR CHILDREN, CHELSEA.—The annual Court of Governors was held on the 20th inst., when a very satisfactory report and balance sheet was presented. Previously to the adoption of the annual report it was announced that Her Majesty the Queen had forwarded a donation of £50 to help to free the hospital from debt. The Princess Louise had sent £25, and the Duke of York, as chairman at the Festival Dinner, at which a sum of nearly £3000 was subscribed, had contributed £25. 1130 in-patients have been admitted during the past year. The ordinary expenditure during the year amounted to £6529 on account of the hospital and of £1751 on account of the Home at Broadstairs, while the ordinary receipts have been £6110 and £704 respectively, the deficit having to be made up from capital account.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations and having conformed to the by-laws and regulations have been admitted Members of the College, viz.:—

Acland, John Musgrave, L.R.C.P. Lond., University College Hospital.
Adams, William Francis, L.R.C.P. Lond., London Hospital.
Alford, Cyril Wolrige, L.R.C.P. Lond., Middlesex Hospital.
Allen, Walter Henry, L.R.C.P. Lond., Mason College, Queen's and General Hospital, Birmingham.
Anderson, John Sewell, L.R.C.P. Lond., St. Bartholomew's Hospital.
Anstey-Chave, Thomas, L.R.C.P. Lond., St. Bartholomew's Hospital.
Barclay, Herbert Clifford, L.R.C.P. Lond., University of Otago, Dunedin, New Zealand.
Barker, Ernest Marriott, L.R.C.P. Lond., Cambridge University and St. Thomas's Hospital.
Barlow, Thomas William Naylor, L.R.C.P. Lond., University College and Royal Infirmary, Liverpool
Behramjee, Dinshah Burjorjee, L.R.C.P. Lond., University of Bombay and Charing-cross Hospital.
Bell, William Blair, L.R.C.P. Lond., King's College Hospital.
Bennetts, Frederick, L.R.C.P. Lond., St. Mary's Hospital.
Benson, John Robinson, L.R.C.P. Lond., King's College Hospital.
Betts, Leonard Bowring, L.R.C.P. Lond., Westminster Hospital.
Bickford, Nicholas Seymour, L.R.C.P. Lond., Charing-cross Hospital.
Black, Lewis Potter, L.R.C.P. Lond., University of Cambridge and Middlesex Hospital.
Blagden, John James, L.R.C.P. Lond., St. Bartholomew's Hospital.
Bonney, William Francis Victor, L.R.C.P. Lond., Middlesex Hospital.
Bramwell, Charles, L.R.C.P. Lond., King's College Hospital.
Briggs, John Arthur Oswald, L.R.C.P. Lond., St. Bartholomew's Hospital.
Broadbent, Joseph, L.R.C.P. Lond., Owens College and Royal Infirmary, Manchester.
Brock, John, L.R.C.P. Lond., St. Bartholomew's Hospital.
Browne-Mason, Hubert Oliver Browne, L.R.C.P. Lond., St. Mary's Hospital.
Bullmore, Frederick Guy, L.R.C.P. Lond., St. Mary's Hospital.
Cameron, Malcolm, L.R.C.P. Lond., London Hospital.
Cann, Francis John Hughtrede, L.R.C.P. Lond., Guy's Hospital.
Clark, Henry Colbatch, L.R.C.P. Lond., Middlesex Hospital.
Clarke, Astley Vavasour, L.R.C.P. Lond., University of Cambridge and Guy's Hospital.
Collis, Edgar Leigh, L.R.C.P. Lond., Oxford University and St. Thomas's Hospital.
Cooper, Harold Merriman, L.R.C.P. Lond., St. George's Hospital.
Coventry, Charles, L.R.C.P. Lond., Owens College and Royal Infirmary, Manchester, and Guy's Hospital.
Culmer, Joseph William, L.R.C.P. Lond., Guy's Hospital.
Dashwood, Charles Ewart, L.R.C.P. Lond., University of Cambridge and London Hospital.
Davis, William Lloyd Bowen, L.R.C.P. Lond., Guy's Hospital.
Douglas, Archibald Robert John, L.R.C.P. Lond., St. Bartholomew's Hospital.
Douglas, Stewart Rankin, L.R.C.P. Lond., St. Bartholomew's Hospital.
Draper, Robert Athelstan, L.R.C.P. Lond., University of Cambridge and St. Mary's Hospital.
Druitt, Claud Francis, L.R.C.P. Lond., University College and Royal Infirmary, Bristol.
Drury, Edward Guy Du, L.R.C.P. Lond., St. Bartholomew's Hospital.
Edington, George Henry, L.R.C.P. Lond., Royal Infirmary, Glasgow, and King's College Hospital.
Eley, Norman William, L.R.C.P. Lond., Mason College, Queen's and General Hospital, Birmingham.
Ellacombe, Gilbert Henry Wemyss, L.R.C.P. Lond., St. Bartholomew's Hospital.
Ellis, Henry Reginald, L.R.C.P. Lond., St. Bartholomew's Hospital.
Emms, Harry Robert, L.R.C.P. Lond., University College Hospital.
Evans, Harold Ward, L.R.C.P. Lond., London Hospital.
Evans, Robert Jones, L.R.C.P. Lond., University College and Royal Infirmary, Liverpool.
Farndale, John William, L.R.C.P. Lond., Mason College, Queen's and General Hospital, Birmingham.
Fenwick, Samuel Charles Collingwood, L.R.C.P. Lond., St. Mary's Hospital.
Fisk, Edward, L.R.C.P. Lond., Guy's Hospital.
Flory, Cyril Hobson, L.R.C.P. Lond., Guy's Hospital.
Folliott, Eawin, L.R.C.P. Lond., St. Bartholomew's Hospital.
Forman, George Herbert, L.R.C.P. Lond., St. Bartholomew's Hospital.
Foster, John Joseph, L.R.C.P. Lond., Guy's Hospital.
Francisco, Sylvester Agostinho, L.R.C.P. Lond., King's College Hospital
Fry, Arthur Brawnfield, L.R.C.P. Lond., London Hospital.
Fryer, Harold Edgar, L.R.C.P. Lond., St. Mary's Hospital.
Gardiner, John, L.R.C.P. Lond., Middlesex Hospital.
Garner, William Langham, L.R.C.P. Lond., University of Cambridge and Guy's Hospital.
Godwin, Frederick James, L.R.C.P. Lond., Charing-cross Hospital.
Goulden, Herbert Edward, L.R.C.P. Lond., Middlesex Hospital.
Grant, Alexander Smeaton, L.R.C.P. Lond., London Hospital.
Grazebrook, Edwyn Robert, L.R.C.P. Lond., University College and Royal Infirmary, Liverpool, and King's College, Hospital.
Greene, William Adams, L.A.H. Dublin, Ledwich School, Mercers and City of Dublin Hospitals, and London Hospital.

Gross, Solomon, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds.
Gunson, John Bernard, L.R.C.P. Lond., University of Adelaide, London Hospital, the University and St. Louis Hospital, Paris.
Hackney, Alfred Clifford John Hill, L.R.C.P. Lond., University College Hospital.
Hallam, Herbert, L.R.C.P. Lond., Firth College and General Infirmary, Sheffield, and University College Hospital.
Ham, Bertie Burnet, L.R.C.P. Lond., Melbourne University and Guy's Hospital.
Hamilton, Roger Kerr, L.R.C.P. Lond., London Hospital.
Hanwell, Gerald Lucas, L.R.C.P. Lond., St. Thomas's Hospital.
Haymes, Henry Evered, L.R.C.P. Lond., St. Thomas's Hospital.
Heard, John, L.R.C.P. Lond., Westminster Hospital.
Hedden, Richard, L.R.C.P. Lond., Guy's Hospital.
Henley, Albert William, L.R.C.P. Lond., Charing-cross Hospital.
Heywood, William Benjamin, L.R.C.P. Lond., Cambridge University and London Hospital.
Hill, Reginald Augustus Lowder, L.R.C.P. Lond., St. Thomas's Hospital.
Hitchfield, Alfred Reginald, L.R.C.P. Lond., Guy's Hospital.
Holliday, William Henry, L.R.C.P. Lond., Yorkshire College and General Infirmary Leeds.
Hope, Edward Culberton, L.R.C.P. Lond., Melbourne University and University College Hospital.
Hopkins, Charles Hensley, L.R.C.P. Lond., St. Bartholomew's Hospital.
Horder, Thomas Jeeves, L.R.C.P. Lond., St. Bartholomew's Hospital.
Hutton, Albert Edward, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds.
Infield, Stephen, L.R.C.P. Lond., Guy's Hospital.
Innes, Hubert, L.R.C.P. Lond., London Hospital.
Johnson, Henry Heath Pochin, L.R.C.P. Lond., Charing-cross Hospital.
Johnson, Marcus Beauchamp, L.R.C.P. Lond., Cambridge University and St. Mary's Hospital.
Jones, Thomas, L.S.A. Lond., London Hospital.
Knowles, Ralph, L.R.C.P. Lond., Owens College and Royal Infirmary, Manchester.
Latchmore, Arthur Thomas, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds.
Leicester, John Cyril Holdich, L.R.C.P. Lond., University College Hospital.
Lowe, Henry, L.R.C.P. Lond., Mason College, Queen's, and General Hospital, Birmingham.
McCarthy, Robert Pringle, L.R.C.P. Lond., Cambridge University and St. Mary's Hospital.
Maurice, Walter Byron, L.R.C.P. Lond., St. Mary's Hospital.
Milbank-Smith, Harry James Miltank, L.R.C.P. Lond., Guy's Hospital.
Moon, Edward Gibson, L.R.C.P. Lond., St. Mary's Hospital.
Muriel, George Bertram, L.R.C.P. Lond., Cambridge University and Guy's Hospital.
Murphy, Jerome Joseph, L.R.C.P. Lond., St. Bartholomew's Hospital.
Murray, William Berkeley, L.R.C.P. Lond., King's College Hospital.
Nash, Elwin Harral Thomas, L.R.C.P. Lond., St. Thomas's Hospital.
Noble, Hugh Percy, L.R.C.P. Lond., Middlesex Hospital.
Parsons, Courtenay Charles, L.R.C.P. Lond., St. Mary's Hospital.
Pendred, Berthorn Fleming, L.R.C.P. Lond., Guy's Hospital.
Phillips, Charles Alleyne, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds.
Pierson, Arthur Cecil Brigg, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds.
Plummer, William Edwin, L.R.C.P. Lond., Guy's Hospital.
Powell, Josiah Cecil, L.R.C.P. Lond., St. Bartholomew's Hospital.
Pratt, Eldon, L.R.C.P. Lond., St. Bartholomew's Hospital.
Preston, Charles Chichester, L.R.C.P. Lond., Owens College and Royal Infirmary, Manchester, and St. Mary's Hospital.
Price, Henry James, L.R.C.P. Lond., University College Hospital.
Price, Thomas Henry, L.R.C.P. Lond., Mason College, Queen's, and General Hospital, Birmingham.
Pridmore, John Walter, L.R.C.P. Lond., University College Hospital and Mason College, Queen's, and General Hospitals, Birmingham.
Prior, John Ralph, L.R.C.P. Lond., King's College Hospital.
Reid, Ernest Stewart, L.R.C.P. Lond., Edinburgh University.
Richards, Lewis William, L.R.C.P. Lond., St. Thomas's Hospital.
Richmond, Benjamin Arthur, L.R.C.P. Lond., Guy's Hospital.
Ridgeway-Macauley, William George, L.R.C.P. Lond., St. Thomas's Hospital.
Roberts, Richard Lumley, L.R.C.P. Lond., Guy's Hospital.
Robinson, Arthur, M.D., C.M. Edin., Edinburgh University.
Rowlands, William Herbert, L.R.C.P. Lond., Mason College, Queen's, and General Hospitals, Birmingham.
Savage, Ernest Smallwood, L.R.C.P. Lond., Oxford University and London Hospital.
Sealy, Geoffrey Orr Fern, L.R.C.P. Lond., Grant Medical College and Bombay University.
Shepherd, Henry Brooks, L.R.C.P. Lond., Middlesex Hospital.
Simmonds, Ernest George, L.R.C.P. Lond., St. Bartholomew's Hospital.
Slocock, Richard, L.R.C.P. Lond., St. Thomas's Hospital.
Smith, Edward Archibald, L.R.C.P. Lond., Yorkshire College and General Infirmary, Leeds, and University College and General Infirmary, Liverpool.
Smith, Maurice Hamblin, L.R.C.P. Lond., Cambridge University and Guy's Hospital.
Smith, Sidney Frederick, L.R.C.P. Lond., St. George's Hospital.
Spark, Percy Charles, L.R.C.P. Lond., Charing-cross Hospital.
Spear, John Augustus, L.R.C.P. Lond., St. Bartholomew's Hospital.
Spicer, Arthur Herbert, L.R.C.P. Lond., Guy's Hospital.
Stanton, Thomas William, L.R.C.P. Lond., Guy's Hospital.
Stead, Charles Clement, L.R.C.P. Lond., Cambridge University and Guy's Hospital.
Stephens, Stanley, L.R.C.P. Lond., St. Mary's Hospital.
Sturdee, Frederick Herbert, L.R.C.P. Lond., St. Thomas's Hospital.
Sutcliffe, Edward Harvey, L.R.C.P. Lond., St. Thomas's Hospital.
Sweet, Edward Hoare, L.R.C.P. Lond., St. Mary's Hospital.
Sworder, Ernest George, L.R.C.P. Lond., St. Mary's Hospital.
Tahmisian, Boghos Boghdasar, L.R.C.P. Lond., St. George's Hospital.
Taylor, Gordon Ernest Oddin, L.R.C.P. Lond., St. Thomas's Hospital.
Teale, Michael Aubrey, L.R.C.P. Lond., St. Thomas's Hospital.
Thomas, William George, L.R.C.P. Lond., Mason College, Queen's and General Hospital, Birmingham.
Tipper, Ernest Harry, L.R.C.P. Lond., Guy's Hospital.
Vellacott, Philip Northcott, L.R.C.P. Lond., Guy's Hospital.
Vise, John Neville Blithe, L.R.C.P. Lond., Westminster Hospital.
Walter, Albert Elijah, L.R.C.P. Lond., Middlesex Hospital.
Ward, Arthur Blackwood, L.R.C.P. Lond., Cambridge University and St. Bartholomew's Hospital.
Warner, Allan, L.R.C.P. Lond., St. Thomas's Hospital.
Welburn, Charles Matthew, L.R.C.P. Lond., St. Bartholomew's Hospital.
Whitelaw, Francis, L.R.C.P. Lond., St. Mary's Hospital.
Williams, Charles Elihu, L.R.C.P. Lond., King's College Hospital.
Williams, Ralph Paul, L.R.C.P. Lond., King's College Hospital.
Williams, Stanley Walter, L.R.C.P. Lond., University College and General Infirmary Liverpool.
Wimble, Herbert Charles, L.R.C.P. Lond., St. Bartholomew's Hospital.
Woods, William James, L.R.C.P. Lond., Queen's College, Belfast Royal Hospital and Royal University of Ireland.
Wright, Samuel Reginald, L.R.C.P. Lond., Charing-cross Hospital.

SOCIETY OF APOTHECARIES OF LONDON, MAY, 1896.—The following candidates passed in the under-mentioned subjects:—

Surgery.—F. J. Ayre, St. Mary's Hospital; R. A. Cooper, St. George's Hospital; M. P. Gabe, Middlesex Hospital; D. C. Kemp, University College Hospital; E. S. Langworthy, St. George's Hospital; J. R. McKinlay, Westminster Hospital; M. Orange, Royal Free Hospital; V. A. Settle, Middlesex Hospital; W. V. P. Teague, London Hospital; C. H. Thomas, London Hospital; and G. S. Thompson, St. George's Hospital.
Medicine, Forensic Medicine, and Midwifery.—F. J. Ayre, St. Mary's Hospital; E. M. Henwood, Royal Free Hospital; J. W. F. Rait, University College Hospital; and L. St. J. Reilly, London Hospital.
Medicine and Forensic Medicine.—D. C. Kemp, University College Hospital.
Medicine and Midwifery.—A. M. St. J. Wright, Madras.
Medicine.—G. R. Smith, Manchester.
Forensic Medicine and Midwifery.—A. P. Murtz, King's College Hospital.
Forensic Medicine.—C. G. Schultz, St. Mary's Hospital; and V. A. Settle, Middlesex Hospital.
Midwifery.—C. H. Nicholson, Middlesex Hospital.

The diploma of the society was granted to the following candidates, entitling them to practise medicine, surgery, and midwifery:—F. J. Ayre, E. M. Henwood, D. C. Kemp, J. R. McKinlay, C. H. Nicholson, M. Orange, G. R. Smith, and A. M. St. J. Wright.

ROYAL UNIVERSITY OF IRELAND: SPRING EXAMINATIONS, 1896.—The examiners have recommended that the following candidates be adjudged to have passed the under-mentioned examinations:—

M.B., B.Ch., B.A.O. Degrees Examination: Upper Pass.—*Samuel T. Beggs, Queen's College, Belfast; *Stevenson L. Cummins, Queen's College, Cork; *Robert J. Johnstone, B.A., Queen's College, Belfast; *Thomas J. Kenny, B.A., Queen's College, Belfast; James St. L. Kirwan, B.A., Queen's College, Galway, and Catholic University School of Medicine; *Walter S. Smyth, Queen's College, Belfast; William M. H. Spiller, Queen's College, Belfast.

Candidates marked thus (*) may present themselves for the further examinations for honours.

Pass.—Richard Allan, Queen's College, Belfast; Harry F. Browne, Queen's College, Belfast; Robert A. Cunningham, Queen's College, Belfast, and School of Medicine, Edinburgh; Mina L. Dobbie, London School of Medicine for Women; George K. Finlay, Catholic University School of Medicine; Francis T. Heron, Queen's College, Belfast; Benjamin B. Hosford, Queen's College, Cork; Edward J. Liddle, Queen's College, Belfast; George M. B. Liddle, Queen's College, Belfast; Francis J. L. P. M'Kenna, Queen's College, Cork, and Catholic University School of Medicine; William J. Prendergast, Queen's College, Cork; Patrick J. Scannell, Queen's College, Cork; George Scott, Queen's College, Belfast; John V. G. Tighe, Catholic University School of Medicine; and Clara L. Williams, B.A., Royal College of Surgeons.
M.D. Degree Examination.—Emily W. Dickson, M.B., B.Ch., B.A.O., and John H. M'Gee, M.B., B.Ch., B.A.O. (private study).

ROYAL COLLEGE OF SURGEONS IN IRELAND—FELLOWSHIP EXAMINATION.—The following gentlemen having passed the necessary examination have been admitted Fellows of the College:—

J. Davison, G. W. Dawson, A. S. Deane, J. D. McFeely, and J. I. Moore.

FOREIGN UNIVERSITY INTELLIGENCE.—*Halle:* Dr. P. Eisler has received the honorary title of Professor of Anatomy.—*Rostock:* Dr. Barfurth of Iurieff (Dorpat) has been appointed to the chair of Anatomy in succession to Dr. A. von Brunn, deceased.—*St. Petersburg (Military Medical Academy):* Dr. S. Botkin has been appointed Extraordinary Professor of Infectious Diseases and of Bacteriology.—*Philadelphia (Jefferson Medical College):* Dr. W. M. L. Coplin of the Vanderbilt University has been appointed Professor of Pathology and Bacteriology.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on May 20th, Dr. Mutch, President, being in the chair. Dr. Michie showed the following pathological specimens:—(1) Hydronephrotic Kidney containing two Calculi; (2) a Large Myoma Uteri; (3) Uterus removed for Pyosalpinx, the tubes being opened from below; (4) Two Uteri removed for Cancer; (5) Five Inches of Colon removed for Cancer; and (6) Portion of Pig's Intestine showing method of suturing. Dr. Michie then read a paper on Gastro-enterostomy. He claimed that the operation relieved pain and prolonged life in cases of cancer of the pylorus for a year or two. He deprecated preliminary washing out of the stomach and abstinence from food by the mouth. Washing out should be done through the wound immediately after incising the stomach. The method of uniting the stomach and jejunum was described, suturing being considered preferable to the use of Murphy's button or other mechanical appliance. Nothing should be given by the mouth for the first twenty-four hours, but ordinary diet could generally be borne on the fourth day. Of six patients operated upon four gained weight and survived for considerable periods, one died from the operation, and one from the effect of the anæsthetic (ether). The paper was discussed by the President, Dr. Watson, Dr. Tresidder, Dr. Hunter, Mr. Wood, and Mr. Ringrose.

THE DIFFUSION OF SMALL-POX.—The information coming to hand bears out the opinion that as soon as Gloucester had, in so far as the bulk of her population is concerned, secured the protection of vaccination, the epidemic of small-pox would abate. The number of new cases of the disease has been for some weeks steadily decreasing, though even now some hundreds of patients in various stages of the malady are in the hospitals and dwellings of the city. Up to Thursday of last week the cases reported during the present epidemic period had reached a total of 1813. The population of Gloucester is estimated at 42,000 persons, hence the disease has attacked 1 person in every 25 of the whole place. This rate of 4 per cent. of population is excessive, seeing that for only some six months has the disease been present in the town. Within the last three weeks the cases have totalled in round numbers to 200, a notable quantity still, although far below the records of any three weeks of the special epidemic period, March and April. It would be interesting to have the data as to ages of persons recently attacked and their condition in reference to vaccination. The rush to the vaccination stations has subsided, and with a declining attack-rate is likely still further to subside. In these circumstances the city has to fear during the coming summer months a succession of cases, not only in the unvaccinated class, but also among adults who, having been vaccinated in infancy only, may fall victims to attacks of a mild nature, which are no less mischievous in the way of infective quality than the severer cases. Indeed, it may be questioned whether these mild cases do not do more harm, by reason of the fact that they so little incommode the sufferers, who accordingly do not always resort to those precautions which are so essential to the safety of others. It is proposed to borrow the sum of £2000 to meet the cost of the exceptional vaccination arrangements, though the matter has still to be finally settled. It would mean four half-yearly rates of ½*d.* in the £. The cost of vaccination and revaccination, inclusive of lymph and other expenses, works out to 1*s.* 10*d.* for each person operated on. A long discussion has been going on in the St. Thomas's rural district on account of alleged neglect on the part of the council as to the non-isolation in hospital of a case of small-pox, the council holding the medical attendant to have been to blame in the matter. A case of supposed small-pox from Westbury, in the Barton Regis rural district, has on admission to hospital in Bristol been diagnosed by Dr. D. S. Davies, the medical officer of health, as one of herpes of an unusual type, and the release from the institution of the patient has been ordered. A man suffering from small-pox at Oystermouth has been isolated in the Swansea Hospital, and has succumbed to the malady. Another case from Mumbles close by has occurred in a household to which some flowers had been consigned from Gloucester. The number of small-pox cases in hospital at Swansea has declined from 13 a fortnight ago to 6, all mild, on Saturday last. The occurrence of another case of small-pox at Pontypridd, in the person of a woman who had slept one night at Gloucester, has placed the authorities in a difficulty because there was no available accommodation in the temporary hospital, which had been designed for one sex only, and was in the occupation of a male patient. The curate of St. Peter's, Derby, has been attacked by small-pox and removed to hospital, the disease having, it is supposed, been contracted whilst he was officiating in some of the low lodging-houses of the borough. At Dalton-in-Furness a second case of small-pox has been sent to the hospital, the patient being the wife of the former patient. She had been in close attendance on her husband.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—The twentieth annual meeting of the British Medical Temperance Association was held on Thursday, May 21st, at the Wilfrid Lawson Temperance Hotel, Woodford Green, near London. Several members enjoyed a drive through Epping Forest before the meeting. Sir B. W. Richardson presided and Dr. J. J. Ridge, the hon. secretary, read the report which showed that 24 new members and 41 new student associates had been enrolled during the year, making in all 430 members, 96 student associates, and 2 (lay) associates. The official organ, the *Medical Pioneer*, besides being sent to every member, associate, and a large number of subscribers, had been gratuitously distributed to the number of 15,000 to medical men and to medical schools and libraries. This would be extended as funds permitted. Notice was taken of the formation of a Continental Medical Temperance Association on similar lines. The treasurer, Dr. Morton, presented the balance sheet, showing a balance in hand of £22. A prize of £3 offered to medical students for an essay on the Action of Alcohol on the Nervous and Circulatory Systems had been awarded to Mr. J. Phillips, jun., of the Bristol Medical School. The usual temperance breakfast will be given at the annual meeting of the British Medical Association in Carlisle on Thursday, July 30th, in the Central Hotel.

PRESENTATIONS TO MEDICAL PRACTITIONERS.—Dr. F. Haycraft Berry, of Watford, Herts, has been presented by the honorary and ordinary members of the Loyal Phœnix Lodge of Oddfellows with a silver epergne.—Dr. Evan Evans has been presented by the successful members of the Llanelly Branch of the St. John Ambulance Class with some silver plate for his instruction on First Aid.—Mr. Jas. G. Boyce, L.R.C.P., L.R.C.S. Irel., of Wotton-under-Edge, has been the recipient of a silver cigarette-case, appropriately inscribed, from the members of the Wotton-under-Edge class of the St. John Ambulance Association as a token of appreciation of his gratuitous services as their lecturer.—Mr. William Hammond, L.R.C.P. Edin., M.R.C.S., of Liskeard, has received a present from the students at Doubledois whom he successfully instructed on First Aid to the injured. The present comprises a revolving bookcase, an armchair, a writing table, a side table, and an illuminated address.—Mr. George John Morgan of Kinnerley, Salop, who is about to leave the district in which he has practised for over twenty years, has been the recipient of an address from the Loyal Argoed Lodge of Oddfellows, to which he was surgeon, and another from friends in the neighbourhood. Mr. Morgan, who is public vaccinator to the Oswestry District Union, has also received a testimonial given under the common seal from the Directors of the Oswestry Incorporation.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of the society was held on Wednesday, May 20th, at 11, Chandos-street, W., the President, Sir James Paget, being in the chair. From the report read by the secretary it appeared that during the year seven new members had been elected and eleven had died and six resigned, leaving 296 at the end of the year. Three widows had been added to the forty-nine on the funds and four had died. The number of orphans receiving assistance had been reduced by one, leaving eight. The receipts available for payments had been £3280 and the grants and expenses had been £3223, including a sum of £452 given at Christmas as a present to the widows and orphans on the books. The funded property had been increased by the purchase of £500 stock, the funded property being now over £95,000. An additional amount—£500—had been received from the executors of Miss Carpue. A grant of £26 under Law 78 was made to a widow. A vote of thanks to the editors of the medical journals for their great kindness in making known the objects of the society was proposed by Mr. Christopher Heath and carried unanimously. The following gentlemen were elected directors to fill the

vacancies caused by death and retirement—viz.: Mr. Bennett, Dr. Wilks, Dr. Frederick Roberts, Dr. Sylvester, Mr. Fountaine, Mr. Malcolm Morris, and Mr. Butlin. A vote of thanks, proposed by Mr. Felce and seconded by Mr. Day, was passed to the President, Sir James Paget, for his kindness in presiding at the meeting.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The annual dinner of the above society was held at the Café Monico on May 20th, the President, Dr. Symons Eccles, being in the chair. Nearly 100 members and guests were present. After the usual loyal toasts the President, in proposing the toast of "The Society," referred to the great success which had been achieved during the current session, especially pointing out that over eighty new members had joined the society and a quarterly medical journal had been successfully started in connexion with the society. The toast of "The Medical Societies" was given by Mr. Bruce Clarke, and acknowledged by Dr. Clement Godson, in the unavoidable absence of the President of the Royal Medical and Chirurgical Society. Dr. Campbell Pope proposed the health of the Cavendish Lecturer, to which Mr. Bryant replied. The "Health of the Guests" was given by Mr. F. Lawrance, and responded to by Sir James Linton, President of the Royal Institute of Painters in Watercolours. The toast of "The President, Dr. Symons Eccles," proposed by Mr. C. B. Keetley in a humorous speech, was received with musical honours. A very successful evening was brought to a close with the toast of "The Officers of the Society," proposed by Mr. H. Menzies, and responded to by the treasurer, Mr. T. G. Alderton, and the secretaries, Mr. L. A. Bidwell and Mr. N. Wood. Both during and after dinner the orchestra of the Brighton Hôtel Métropole performed a selection of music.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Whitsuntide Recess.

THE House of Lords adjourned for the Whitsuntide Recess on Thursday, May 21st, and the House of Commons on the following day. The final sitting of the latter was an all-night one, lasting from 3 P.M. on Thursday until 1.30 P.M. on Friday.

Public Health (Scotland) Bill.

This Bill, after a somewhat severe handling in the House of Lords, has found its way into the House of Commons, where it has been put down for second reading on Monday, June 1st.

The Administration of Workhouse Infirmaries.

In the House of Commons there has been ordered a return showing, in respect of each workhouse and separate workhouse infirmary in England and Wales, the number of persons occupying the wards for the sick on June 1st, 1896 (distinguishing the sick and bedridden from those who are aged and infirm only), the number of paid officers acting as nurses (distinguishing those who, prior to their appointment by the guardians, had received any training in nursing from those who had no training prior to appointment and who are now, as probationers or otherwise, receiving training in nursing), and the period or average period of tenure of office of such officers, excluding those who had not received training in nursing prior to appointment; also the number of pauper inmates who assist in the personal care of the sick, &c., included in the return, distinguishing the number of those who are convalescent patients.

HOUSE OF COMMONS.

THURSDAY, MAY 21ST.

Swine Fever in Ireland.

Mr. Walter Long, in reply to Mr. Kilbride, said that the regulations which prohibit the movement of swine from Ireland into Lancashire except for slaughter and under licence were imposed by the local authority in order to prevent the introduction of swine fever into the county, and it rested with that authority and not with him to say whether, and if so at what date, the regulations might properly be withdrawn. It was unfortunately not the case that Ireland was a non-infected area, 371 outbreaks of swine fever having occurred during the first eighteen weeks of the present year.

Carlow County Infirmary.

Mr. Engledew asked the Chief Secretary to the Lord-Lieutenant of Ireland, with regard to the fact that the Carlow County Infirmary was provided by law for the treatment of the poor and destitute of that county and its expenses provided almost entirely from the public funds of the county, whether he was aware that there were grave doubts in the minds of the ratepayers of the county as to whether that institution treated any of the poor and destitute of the county, and whether the law as to the admission of the patients, the area from which such patients should be admitted, and the manner of admission was carried out, and as to whether the funds of the institution were spent to the best advantage; and whether he would, under these circumstances, consider the necessity of directing that this institution be inspected, as directed by law, by the Local Government Board inspector, who would also inquire into its general administration, and also that all institutions provided for the treatment of the poor and destitute and paid for out of public funds should be regularly inspected by a Government official as directed by law.—Mr. Gerald Balfour replied: I am informed that 90 per cent. of the patients relieved in the Carlow Infirmary belong to the poorer classes who are treated gratuitously; that the provision of the law as regards the admission of patients is habitually complied with; that the governors believe the funds are expended to the best advantage; and that the accounts are periodically published after audit by a manager of the Bank of Ireland. As regards the second part of the question I see no sufficient ground for applying in this particular case a system of inspection which for more than fifty years has fallen into disuse.

The Lee-Metford Rifle.

Mr. Brodrick, Under Secretary of State for War, stated, in reply to Mr. Seton-Karr, that no information had been received at the War Office as to the discarding at Bulawayo of the Lee-Metford rifle, but he might say that the question of the bullet was being fully considered.

BOOKS, ETC., RECEIVED.

BLAKISTON, SON, AND CO., Walnut-street, Philadelphia.
Borderland Studies. By G. M. Gould, A.M., M.D.

CHAPMAN AND HALL, Henrietta-street, Covent-garden, London.
The Old Light and the New: Dealing with the Chemistry of Colour and the New Photography. By Wm. Ackroyd, F.I.C. Illustrated. 1896. Price 1s. 6d. net.

CHATTO AND WINDUS, Piccadilly, London.
An Easy-going Fellow. By C. J. Wills. 1896. Price 6s.

CHURCHILL, J. & A., Great Marlborough-street, London, W.
Southall's Organic Materia Medica. By John Barclay, B.Sc. Lond. Fifth Edition. 1896. Price 6s.

GRIFFIN, CHAS., AND CO., Exeter-street, Strand, London.
Year-Book of the Scientific and Learned Societies of Great Britain and Ireland. Compiled from official sources. Thirteenth annual issue. 1896. Price 7s. 6d.

KEGAN PAUL, TRENCH, TRÜBNER AND CO., Charing-cross-road, London.
Infantile Mortality during Childbirth and its Prevention. By A. Brothers, B.S., M.D. 1896. Price 7s. 6d. net.
The Co-Education of the Sexes. By Mabel Hawtrey. 1896.

MACMILLAN AND CO., London.
Physics for Students of Medicine. By A. Daniell, M.A., LL.B., D.Sc., F.R.S.E. 1896. Price 4s. 6d.
A System of Medicine. By many Writers. Edited by T. C. Allbutt, M.A., M.D. Vol. I. 1896. Price 25s.

NEWMANN, O., AND CO., Newman-street, London, W.
Original Songs, Games, and Entertainments for Infants' Schools (with tunes compiled from various sources). By Wilhelmina L. Rooper, revised by C. B. Shuttleworth. 1895. Price 2s.

NUTT, D., 270, Strand, London.
The Frog: an Introduction to Anatomy, Histology, and Embryology. By the late A. Milnes Marshall, M.D., D.Sc., F.R.S. Edited by G. H. Fowler, B.A., Ph.D. Sixth Edition. 1896. Price 4s.

PENTLAND, YOUNG J., Edinburgh and London.
A Practical Guide to Meat Inspection. By Thomas Walley, M.R.C.V.S. Third Edition. Illustrated. 1896.
The Fundus Oculi, with an Ophthalmoscopic Atlas illustrating its Physiological and Pathological Conditions. By W. Adams Frost, F.R.C.S. 1896. Price 3 guineas.

SCIENTIFIC PRESS, Strand, London.
Elementary Anatomy and Surgery for Nurses. By W. McAdam Eccles, M.S. Lond., F.R.C.S. 1896. Price 2s. 6d.

STEINHEIL, G., Paris.
Formulaire Aide-Mémoire de la Faculté de Médecine et des Médecins des Hôpitaux de Paris. Par Dr. Fernand Roux. Quatrième édition. 1896.

SWAN SONNENSCHEIN AND CO., Paternoster-square, London.
Thoughts on Evolution. By P. G. F. 1896. Price 1s.

UNWIN, T. FISHER, Paternoster-square, London.
In the Kingdom of the Shah. By E. Treacher Collins, F.R.C.S. 1896. Price 12s.

Certifying Surgeon's Daily Report Book; edited by James Holmes, M.D. (T. H. Haynurst, Radcliffe, Manchester); price 2s.—Geometrical Drawing for Science and Art Students; By Joshua Petty (O. Newmann and Co., Newman-street, London); price 1s. 6d.—Pestalozzi Series of Aids for Teaching Geography (O. Newmann and Co., London).—The Quarterly Journal of Microscopical Science, May, 1896 (J. & A. Churchill, London); price 10s.—Le Venin des Serpents; par Dr. A. Calmette (Société d'Éditions Scientifiques, Paris, 1896).—Nouvelles Formules d'Oculistique (1889-1896); par Dr. de Bourgon (Société d'Éditions Scientifiques, Paris).—La Stérilisation Pratique en Chirurgie; par Dr. C. Levassort (Société d'Éditions Scientifiques, Paris, 1896).—Brain: a Journal of Neurology; part 73; Spring, 1896 (Macmillan and Co., London); price 3s. 6d.—The Dwellings of the Poor: Report of the Mansion House Council for the year ending Dec. 31st, 1895 (Cassell and Co., London, 1896); price 1s.—Magazines, &c., for June: Strand Magazine, Boys' Own Paper, Girls' Own Paper, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Architecture, Strand Musical Magazine, Chapman's Magazine, Myra's Journal.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, J., M.D. Aberd., F.R.C.S. Eng., has been appointed Medical Officer for the Workhouse of the Eastbourne Union.

ARCHIBALD, A., M.B., M.S. Aberd., has been appointed Assistant Medical Officer to the Gordon-road Workhouse and the Infirmary of the Parish of Camberwell.

AYMER, JAMES, M.B., C.M. Aberd., has been reappointed Parochial Medical Officer by the Kinneff Parish Council.

BLANDFORD, J. J. G., L.R.C.P. Lond., M.R.C.S., has been appointed Fifth Assistant Medical Officer to the London County Lunatic Asylum at Banstead.

BORTHWICK, THOS., M.D., Ch.M. Edin., has been appointed Medical Officer for the district of Campbelltown South Australia.

BOSTOCK, R. H. F., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Norton Sanitary District of the Malton Union.

BRYAN, JOHN M., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of Health for the St. James's (Northampton) Urban Sanitary District.

BUCKELL, F., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Borough of Romsey.

BURGES, R. E., M.D., M.Ch. Irel., has been appointed Medical Officer for Hoole, vice Watson, resigned.

BURNETT, L. B., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Surgeon to the Leicester Infirmary.

CALLAGHAN, JOSEPH, L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed *pro tem.* Visiting Justice and Deputy Licensing Magistrate at Windsor, New South Wales.

CALVERLEY, J. E. G., L.R.C.P. Lond., M.R.C.S., has been appointed House Surgeon to the Metropolitan Hospital, Kingsland-road.

COOLEY, A. G., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed a Medical Officer and Vaccinator for the District of Campbelltown, New South Wales.

CRAWFURD, RAYMOND, M.A., M.D. Oxon., M.R.C.P., has been appointed Physician to Out-patients at the Victoria Hospital for Sick Children, Chelsea.

CROUCH, E. J., M.R.C.S., L.S.A. Lond., has been appointed, *pro tem.*, a Government Medical Officer in Hobart, Tasmania.

FALKENER, L., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant House Physician to the Metropolitan Hospital, Kingsland-road.

FENN, A. C., L.S.A., has been appointed Assistant Medical Officer at the Fever Hospital, Dover.

FINDLAY, W., M.B., C.M. Aberd., has been appointed Medical Officer to the Aberdeen General Dispensary, vice Edmonds, resigned.

FLORY, CYRIL H., M.R.C.S., L.R.C.P., has been appointed House Physician to the Royal Hospital, Sheffield.

FURNIVALL, P., F.R.C.S., L.R.C.P. Lond., has been appointed Assistant Surgeon to the Metropolitan Hospital, Kingsland-road.

HALLAM, H., M.R.C.S., L.R.C.P., has been appointed Junior Assistant House Physician to the Royal Hospital, Sheffield.

HAMPTON, T., L.R.C.P. Lond., M.R.C.S., has been apponted House Physician to the Metropolitan Hospital, Kingsland-road.

HOGG, F. S. D., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Bradwell Sanitary District of the Maldon Union.

HUGHES, A. E. P., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Gordon-road Workhouse and the Infirmary of the Parish of Camberwell.

HUSBAND, C., M.R.C.S., has been reappointed Medical Officer of Health for the City of Ripon.

JACKSON, E. S., M.B., C.M. Edin., has been reappointed Medical Officer by the Carnforth District Council.

JOYCE, ALFRED F., M.B., Ch.B Melb., has been appointed Officer of Health for Moorabbin Shire, West Riding, Victoria, Australia.

KAY, J. G., M.B., M.S. Edin., has been appointed Medical Officer for the Tintern Sanitary District of the Chepstow Union and also for the Trellick Sanitary District of the Monmouth Union.

KER, CLAUDE B., M.B., C.M. Edin., has been appointed Medical Superintendent of the Edinburgh City Hospital for Infectious Disease.

LYDDON, RICHARD, M.R.C.S. Eng., L.S.A. Lond., has been appointed Medical Officer of Health to the Urban and Port Sanitary Authorities, Deal, vice A. Bruce Payne, deceased.

MATTHEWS, J. S., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Rural Sanitary Districts of Machynlleth, Pennal, and Scuborycoed.

MORRISON, A. T., M.B., B.Ch. Irel., has been appointed District Medical Officer to the Aylesbury Union.

PHILLIPS, L. C. P., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed House Physician to the Royal Free Hospital, Gray's-inn-road, London.

POLLARD, GEO. W., M.B. Edin., has been appointed Senior House Surgeon to the Children's Hospital, Myrtle-street, Liverpool.

RAWLINGS, J. D., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed House Physician to the General Lying-in Hospital, York-road, Lambeth.

SANDALL, T. EDWARD, B.A., M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer of Health by the Alford Urban District Council.

SHORTRIDGE, T. W., M.D. Brux., L.R.C.P., L.R.C.S. Edin., has been re-appointed Medical Officer of Health for Honiton.

SIBLEY, W. K., M.A., M.D. Camb., M.R.C.P. Lond., has been appointed Medical Examiner to the New York Life Insurance Company.

TOYE, E. J., B.Sc. Lond., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to the Metropolitan Hospital, Kingsland-road.

Errata.—In the Appointments column of May 23rd, under the name Woolicombe, "Senior Honorary Surgeon" should read *a Senior*, &c., and the name "Squire" should read *Square*.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BRENTFORD UNION.—Medical Superintendent of Infirmary and Medical Officer of Workhouse and Schools. Salary £250 per annum, with furnished residence in the Infirmary, rations, washing, &c., or £300, with furnished residence, washing, &c. Also Assistant Medical Officer, unmarried. Salary £100 per annum, with furnished apartments in the infirmary, rations, washing, &c. Applications to the Clerk to the Guardians, Union Offices, Isleworth, W.

BOROUGH HOSPITAL, Birkenhead.—Junior House Surgeon. Salary £60 per annum, with board and lodging, but no wines, spirits, or beer.

BUCKS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer, unmarried, at the Asylum at Stone, near Aylesbury. Salary £100 per annum, with board and furnished apartments in the Asylum. Applications to the Clerk, County Hall, Aylesbury.

CANCER HOSPITAL (Free), Fulham-road, S.W.—House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

CHARING-CROSS HOSPITAL, London.—Surgical Registrar. Salary £40 per annum.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. Salary at the rate of £30 per annum, with board and residence.

FISHERTON ASYLUM.—Locum Tenens wanted the second week in June for three weeks. Apply to Dr. Finch, The Asylum, Salisbury.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—House Surgeon to Out-patients (non-resident), for six months. Salary 25 guineas.

LONDON HOSPITAL, Whitechapel, E.—Medical Registrar. Salary £100 per annum. Also Assistant Physician.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN, Park-place, Cheetham-hill-road.—Honorary Assistant Physician.

PARISH OF CREICH (Sutherland).—Resident Medical Officer and Vaccinator. Salary as Medical Officer, to include medicines, £45 per annum; as Vaccinator, the statutory fees, with an allowance of £5 per year on certain conditions. Applications to Inspector of Poor, Bonar Bridge, Sutherland.

PARISH OF KINCARDINE, Ross.—Resident Medical Officer and Vaccinator. Salary as Medical Officer, to include medicines, £42 10*s.* per annum, as Vaccinator the statutory fees, with an allowance of £5 per year, on certain conditions. Applications to the Chairman of the Parish Council, Ardgay, Ross.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Shoreditch, N.E.—Physician to Out-patients. Applications to the Secretary, Office, 27, Clement's-lane, E.C.

Births, Marriages, and Deaths.

BIRTHS.

DALTON.—On May 26th, at Cranmer House, Cambridge, the wife of J. H. C. Dalton, M.D. Camb., of Trinity College, of a son, born prematurely.

HUME.—On May 24th, the wife of F. N. Hume, Medical Superintendent of the Northern Hospital, Winchmore-hill, N., of a son.

MILTON.—At Port Said, Egypt, the wife of F. R. S. Milton, M.R.C.S., of a son.

PEACHEY.—On May 23rd, at Ballyconnell, co. Cavan, the widow of Allan Thomas Peachey, M.R.C.S., of a son.

PERCEVAL.—On May 23rd, at Whittingham, Preston, the wife of F. Perceval, M.R.C.S., L.R.C.P. Lond., of a daughter.

PRESTON.—On May 8rd, at Kent House, Ryde, I.W., the wife of Lionel L. Preston, M.B. & B.S. Durh., of a daughter.

WILKINSON.—On May 20th, at Leh House, Windsor, the wife of Clement J. Wilkinson, M.R.C.S., of a daughter.

MARRIAGES.

CLUTTON—YOUNG.—On May 21st, at Guildford, H. H. Clutton, F.R.C.S., of Portland-place, W., to Margaret, third daugnter of the late Rev. Canon Young, Rector of Whitnash, Warwickshire.

TUNSTALL—HALLWRIGHT.—On May 24th, at St. Augustine's Church, Edgbaston, John Ogle Tunstall, M.D. Lond., of Ashby House, Sutton Coldfield, to Sibyl Gertrude, younger daughter of Matthew Hallwright, M.R.C.S., Hagley-road, Birmingham.

WYSE—GALLIERS.—On May 19th, at Hanwell Parish Church, by the Rev. Ewart Barter, Richard Wyse, M.A., M.D., Polmont, Stirlingshire, to Anne Sophia, daughter of George Tomkins Galliers, Yan Yean, Australia, late of Herefordshire.

DEATHS.

DUCKWORTH.—On April 28th, at Cardiff Castle, Wheeler-road, Cleveland Town, Bangalore, F. Duckworth, M.D., Surgeon-Major, Retired List, late of Her Majesty's Indian Medical Service, aged 63 years and 7 months. Deeply regretted.

HARKNESS.—On May 22nd, at his residence, Fairlight House, Hampton-hill, Alex Harkness, L.R.C.P. & S. Edin., aged 45 years.

HORTON.—On May 26th, at Bryn Hafod, Bromley, Kent, the residence of his son-in-law, James Horton, M.R.C.S. Lond., of Stepney and Highbury, in his 75th year.

PEACHEY.—On May 22nd, at Ballyconnel, co. Cavan, Allan Thomas Peachey, M.R.C.S., aged 39 years.

WEBB.—On May 20th, 1896, at Rock Bank, Carlton-road, Tunbridge Wells, Kent, Edward Lowe Webb, M.R.C.P. Ed., M.R.C.S. Eng., L.S.A., aged 71 years, late of 9, St. George's-road, London, S.W.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 28th, 1896.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb.	Solar Radiation Vacuo.	Maximum Temp. Shade.	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
May 22	29·91	S.W.	50	49	65	58	47	0·12	Raining
,, 23	29·98	N.	57	55	70	66	50	0·02	Overcast
,, 24	30·35	N.E.	58	51	102	64	50	...	Cloudy
,, 25	30·46	N.E.	54	48	101	62	45	...	Cloudy
,, 26	30·37	E.	54	49	111	66	47	...	Cloudy
,, 27	30·24	N.E.	57	51	115	68	47	...	Fine
,, 28	30·27	N.E.	56	51	115	66	50	...	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (1st).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (3 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (2nd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (2 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (3rd).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (4th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Great Northern Central (Gynæcological, 2.30 P.M.).

FRIDAY (5th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.) Gt. Northern Central (2.30 P.M.).

SATURDAY (6th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (1st).—ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square, W.C.).—8 P.M. Annual General Meeting. Dr. Washbourn: Some Points in Connexion with the Bacteria of the Mouth.

WEDNESDAY (3rd).—OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Papers:—Mr. A. Doran: Cases of Fibroma of the Ovary and Ovarian Ligament Removed by Operation; with a Series of After-histories of Cases reported in the "Transactions" since 1879.—Dr. J. Phillips: Anterior Colpotomy.—Mr. T. H. Morse: A Case of Impacted Ovarian Dermoid Cyst Removed during the Ninth Month of Pregnancy.

FRIDAY (5th).—WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, W.).—8.30 P.M. Clinical Evening. Dr. Clemow: Rodent Ulcer Excised and Grafted.—Mr. S. Edwards: Curious Anal Affection.—Dr. Abraham and Dr. Dockrell: Skin Affections. And other Cases by Dr. Chapman, Mr. Keetley, Mr. Bidwell, and Mr. Eccles.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (1st).—LONDON POST-GRADUATE COURSE.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Mr. G. Stoker: Chronic Glandular Disease of the Nose and Naso-Pharynx.

WEDNESDAY (3rd).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Dr. Tooth: Paralysis of the Cranial Nerves.

HOSPITAL FOR CONSUMPTION, &c. (Brompton).—4 P.M. Dr. Wethered: Types of Pulmonary Tuberculosis.

LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. Payne: Acne.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. S. Paget: Surgical Cases.

THURSDAY (4th).—LONDON POST-GRADUATE COURSE.—Brit. Inst. of Preventive Medicine, Gt. Russell-st., W.C., 3.30 P.M., Dr. Allan Macfadyen and Mr. A. G. Foulerton: Qualitative Tests for Sugar and Acetone in Urine.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Mr. T. Bryant: Clinical Lecture.

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-st., W.C.).—4 P.M. Lecture by Dr. Barlow.

VICTORIA HOSPITAL FOR CHILDREN (Tite-street, S.W.).—4 P.M. Dr. Rolleston: Hepatic Disease in Children.

FRIDAY (5th).—LONDON POST-GRADUATE COURSE.—King's College, 3 to 5 P.M., Prof. Crookshank: Actinomycosis and Glanders.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET should be addressed "To the Manager."

We cannot undertake to return MSS. not used.

A DIAGNOSTIC SIGN IN MALARIA.

DR. BOISSON, a French military surgeon, finds that patients suffering from malarial affections, even those of a masked or latent character, always present a peculiar discolouration of the nails. It appears to be independent of the locality in which the malaria was contracted, as he has found it in soldiers both from Tonquin and Madagascar. It appears before the rigor, increasing during the cold stage, and attains its maximum in the middle of the hot stage, after which it gradually diminishes, disappearing towards the close of the sweating stage. This discolouration has been remarked by other observers, but has generally been looked upon as due to circulatory troubles during the cold stage. According to Dr. Boisson, however, it cannot be thus accounted for, as it commences before the cold stage and is most evident later on. It differs also from the livid blue tint due to local asphyxia, being of a gray slate colour, and is due probably to a change in the hæmoglobin of those red corpuscles which are destined to be destroyed during the acute stage. As to the diagnostic value of the sign, he has never failed to find it at the commencement of a malarial attack, and has observed it where no fever occurred in an abortive attack. Once when a patient known to have had malaria was attacked by acute fever with rigors, as the ungual discolouration was absent Dr. Boisson excluded malaria in his diagnosis, and the sequel proved that he was justified in doing so, the affection proving to be an ordinary acute croupous pneumonia. Again, a man with cystitis suffered from intermittent attacks of pyrexia, which Dr. Boisson, in consequence of the presence of discolouration of the nails, was able to diagnose, correctly as it afterwards proved, as due to malaria and not to urinary infection.

L.S.A.—Next week.

"A FEMALE MEMBER OF THE ARMY MEDICAL DEPARTMENT."

To the Editors of THE LANCET.

SIRS,—With reference to "Inquirer's" remark as to the qualifications of Inspector-General James Barry not being traced by him in the "Medical Directory," I have to state that the Chief Clerk in the Army Medical Office, Victoria-street, has to-day informed me that James Barry was duly qualified M.D., and was always so designated in official records. In my earliest letter on this subject in THE LANCET, and again in the preface to my novel "A Modern Sphinx," I alluded to the fact, quoting the experiences of Dr. Thomas Jobson, who qualified in Edinburgh at the same time. I am, Sirs, yours faithfully,

Savage Club, May 21st, 1896. E. ROGERS, Lieutenant-Colonel.

MEDICAL CORONERS AND PROFESSIONAL ETIQUETTE.

To the Editors of THE LANCET.

SIRS,—I beg to call your attention to the following, and shall be glad if you will publish the same in THE LANCET as I consider it to be a matter especially calling for attention.

In January last, about 2 A.M., I was called to a woman aged sixty years, resident two miles from my house. Upon arrival I found the patient had been dead about half an hour; she had had no occasion to consult a medical man for a period of twelve months previously. The case was reported to the coroner for the lower division of Gloucestershire in the customary manner, and two days later the relatives of the deceased informed me that the coroner had decided not to hold an inquest.

A few days later I received an urgent message to visit a private patient, who had been under my care for over three years. I found him to have all the symptoms of corrosive poisoning, and, in addition, certain bottles containing corrosive fluids were removed from his bedroom. All these I carefully sealed down and still retain in my possession. The patient was afterwards seen by my partner, and, later, by a consulting physician from Clifton, and the above diagnosis maintained; the patient succumbed on the tenth day. The coroner was notified, and on the day of the inquest I was informed by the police officer that another local medical man had been ordered to make a post-mortem examination, the said officer remarking, "Of course, you will attend the inquest." I need hardly mention that I did not do so. At the inquest the medical man was of opinion that death was due to inflammation of the intestines and a verdict was returned in accordance with his evidence.

In commenting on these two cases I may say I did not receive any intimation from the coroner, in fact, my claims were completely ignored by him. In the first case I should like to know, Was the coroner justified in giving a certificate of death without holding an inquest? In the second case, Is it not customary for medical men in attendance to be called to give evidence when an inquest is held? If we are to receive such treatment from a medical coroner what may we expect from lay ones?

Since writing the above my partner has been similarly treated by the same coroner. Yesterday he was called to a man who had been run over by a cart. He found him in a dying condition and he expired almost immediately. An inquest was held to-day, and although he was not summoned my partner was present at the inquiry. A verdict was arrived at without any medical evidence, notwithstanding the fact that a juryman expressed surprise that no medical evidence was forthcoming. The coroner even went so far as to say that the man probably died from internal hæmorrhage, the result of rupture of the liver, and quoted a previous case as an example; whereas my partner, who found fractures of several ribs, the clavicle, and left tibia, is of opinion that the liver was uninjured. The coroner also remarked to the jurymen that had the deceased been found dead in bed he would have granted a necropsy; this is at variance with his behaviour in the first case. Apologising for troubling you, I am, Sirs, yours truly,

Kingswood, May 5th, 1896. R. WILLIAM BRIMACOMBE.

M. U.—The next International Medical Congress will be held at Moscow in 1897. Our correspondent does not sufficiently define the post of the gentleman whose name is desired, but the "Medical Directory" properly searched will give full information.

J. H. W.—We regret not to have had the information handy. The Caledonian and the Sun both offer the facility required; but not, perhaps, without limitations.

"STERILISATION OF MILK."

To the Editors of THE LANCET.

SIRS,—I desire to make a correction in my letter that appeared in THE LANCET on p. 1405, May 16th inst., to this effect: Immersion during five minutes of any steriliser (such as the Cathcart apparatus) in my cooler for hot sterilised milk reduces the temperature of the latter 100° F. (not 50°) say from 200° to 100°, and in ten minutes cools the milk down to the temperature of the water from the main tap; the latter envelops the entire heated surface of the steriliser by direct contact, running in and out of the cooler with great velocity. The water being often down to 45° F., all bacterial development is practically stopped whilst the immersion is continued.

I am, Sirs, yours faithfully,

Waterloo, Liverpool, May 25th, 1896. C. H. LEET, F.R.C.S. Eng.

A. H. C.—Our correspondent's previous communication contained no details. He could not expect us to guess at the causes of quarrel and then comment on them. He hardly needs our encouragement to believe that it is wrong to practise without a diploma. With regard to the offending notice board we can only repeat what we have previously said: In the absence of any precise rules on the matter, the size of a board, the phraseology of its legend, and the duration of its public life must be matters of private taste.

H. A. B.—We are not quite certain whose conduct our correspondent wishes to bring to the notice of the General Medical Council. He should consult his solicitor.

THE TREATMENT OF PLEURITIC EFFUSION.

To the Editors of THE LANCET.

SIRS,—I should be obliged to any of your readers for their advice on the following case. A patient was sent to me in April, recovering from pleurisy with effusion, for which he had been aspirated by his local medical attendant. Finding fluid present I, on April 16th, aspirated, drawing off 150 ounces, but so quickly did it return that on the 24th I again drew off 130 ounces, and on May 7th and 21st 160 and 167 ounces respectively. Locally I have tried blisters, painting with iodine, and a compound ointment of mercury, belladonna, iodine, and camphor, but with no effect. Internally he is taking iodide of potassium and syrupus ferri iodidi. Would frequent aspirations be of use, and what local or internal remedies could I try? I am, Sirs, yours truly,

May 25th, 1896. UBIQUE.

Mr. J. A. Todd.—It is illegal to make a post-mortem examination without permission of the friends of a deceased person or the coroner, as the case may be. This is both common law and equity. The offence is looked upon as "an assault on the body." We fully endorse the letter and spirit of the law. Many people have a religious and sentimental objection to a necropsy on departed relatives or friends, and surely this should receive due recognition. Like other privileges it is liable to abuse. We have reason to believe that it is not an uncommon practice for paupers in workhouses to bequeath their bodies to fellow inmates to prevent their being utilised for dissection under the Anatomy Acts.

R. W. (Epsom).—Any of the instrument makers whose names occur in our advertisement columns could make the appliances at a moderate cost according to instruction. We are not aware that we have ever alluded to any one firm by name.

"THE POISON OF THE PRIMULA."

To the Editors of THE LANCET.

SIRS,—In answer to Dr. Clemesha's letter I may mention that during the last few months I have seen two cases of what may be described as eczema resulting from the presence of the primula family. The face and hands were chiefly affected. In both patients the eyelids of one eye were inflamed and closed, and the fingers presented erythematous eczema with small blebs, some of which were hæmorrhagic. I agree with the writer in thinking that primula poisoning is rather common.

I am, Sirs, yours truly,

HENRY WALDO,

Physician to the Bristol Royal Infirmary, and in charge of

May 26th, 1896. the Department for Skin Diseases.

Mr. R. Lloyd Legate.—So far as we can learn there is no intention of including in this Bill any but poor-law officers as such, and, if so, its provisions will not extend to posts of medical officers of health, whether held by poor-law medical officers or not.

J. D.—Henoch's Diseases of Children can only be obtained by subscribing to the New Sydenham Society. It is, perhaps, the best book on the subject.

ERRATUM.—The price quoted for "Bowlby's Surgical Pathology" in our review of the book on May 23rd is 9*s.*, it should have been 10*s.* 6*d.*

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*Rochdale Observer, Birmingham Post, Kendal Mercury, Wakefield Herald, Oldham Standard, Sussex Daily News, Hereford Times, Ashton-under-Lyne Reporter, Bradford Observer, Newcastle Leader, South Wales Daily News, Pioneer Mail, Dundee Advertiser, North Express, Times of India, Sheffield Telegraph, Sunderland Herald, Bristol Mercury, Western Daily Mercury, North British Daily Mail, Worcester Daily Times, Leeds Mercury, Manchester Courier, Leicester Post, Craven Herald, Scotsman, Builder, Forfar Herald, Bridgwater Independent, Western Mail, Somerset City Herald, Liverpool Daily Post, Architect, Yorkshire Post, Wellingborough News, Sanitary Record, City Press, Brighton Gazette, Spalding Free Press, Yorkshire Evening Post, Elgin Courant, Hertfordshire Mercury, Weekly Free Press and Aberdeen Herald, Reading Mercury, Local Government Chronicle, West Middlesex Standard, Mining Journal, Oswestry and Border Counties Advertiser, Surrey Advertiser, West Middlesex Advertiser, Belfast Evening Telegraph, Local Government Journal, Beverley Recorder, Sunday Times, St. Bartholomew's Hospital Journal, Gloucestershire Chronicle, Dorset County Chronicle, Eastern Counties Times, Glasgow Evening News Durham Chronicle, Lincolnshire Echo, Le Courrier de la Presse, Western Mail, &c., &c.*

Communications, Letters, &c., have been received from—

A.—Dr. F. J. Allen, Birmingham; Mr. E. G. Allen, Lond; Messrs. Arbuthnot and Co., Lond.; Messrs. Arnold and Sons, Lond.; A. B., Liverpool.

B.—Dr. C. Bodon, Budapest; Mr. M. A. Boyd, Dublin; Mr. H. E. Blake, Lond.; Messrs. Burroughs, Wellcome and Co., Lond.; Messrs. Burgoyne, Burbidges and Co., Lond.; Borough Hosp., Birkenhead, Sec. of; British Medical Association, Barbados, Hon. Sec. of; Baker-street Association of Nurses, Lond., Supt. of; Borax, Lond.; Brisbane, Lond.

C.—Dr. H. Carter, St. Louis; Mr. A. C. Clarke, Lond.; Mr. T. J. Carroll, Newmarket, co. Cork; Mr. R. D. Cameron, North Cave; Mr. T. Carwardine, Bristol; Mr. T. D. A. Cockerell, New Mexico, U.S.A.; Messrs. J. & A. Churchill, Lond; Civil Rights Defence Committee, Lond., Sec. of; Croydon Borough Hospital, Waddon, Sec. of; City of Aberdeen, Medical Officer of Health of; Crystal Palace Co., Lond., Sec. of; Cortland Wagon Co., Lond.

D.—Dr. C. Dukes, Rugby; Dr. M. Demakis, Triccala, Thessalia, Greece; Surg.-Capt. H. E. Drake-Brockman, Bombay; Mr. F. J. Davies, Cwm Carne; Department of Health, Chicago, Sec. of.

E.—Mr. A. Eddowes, Loughborough; Messrs. Elliott, Son and Boyton, Lond.

F.—Fisherton House, Salisbury, Sec. of.

G.—Dr. H. M. W. Graz, Bonn; Mr. H. L. Gill, Halifax; Mr. F. C. Garrett, Worksop; Government Laboratory, Hong Kong, Analyst of.

H.—Mr. S. H. Harris, Lond.; Mr. C. H. Huish, Lond.; Mr. S. Hirzel, Leipzig; Mr. J. Hoysted, Newcastle; Mr. M. J. Houghton, Ilford; Mrs. Harkness, Hampton Hill; Howard Association, Lond., Sec. of; H. A. B., Lond.

I.—Income, Lond.

J.—*Journal of the Society of Public Arts*, Sec. of.

L.—Dr. D. Lawson, Newport, Mon.; Dr. T. J. Lavers, Lond; Mr. H. K. Lewis, Lond.; Mr. H. Littlewood, Leeds; Mr. G. S. Leggatt, Lond.; Mr. J. D. Lamb, Lond.; Mrs. Leach, Axminster; Messrs. J. G. Lear and Son, Gt. Malvern; Messrs Lynch and Co., Lond.; Lighting Corporation, Lond., Sec. of; Liquor Carnis Co., Aston Clinton, Manager of; Lattice Elastic Stocking Co., Lond.; Locum Tenens, Aberford; Locum, Lond.

M.—Dr. Rutherford Morison, Newcastle; Dr. D. Macaulay, Whiteinch, Glasgow; Dr. J. C. McVail, Glasgow; Dr. A. Macphail, Glasgow; Dr. D. Macartney, Glasgow; Dr. S. Messulam, Sofia, Bulgaria; Mr. J. D. Malcolm, Lond.; Mr. J. Marshall, Chatteris; Messrs. E. Marlborough and Co., Lond.; Middlesex Hosp., Lond., Sec.-Supt. of; Maltine Mfg. Co., Lond.; Medicus, Lond.

N.—Dr. E. Norton, Folkestone; Mr. W. G. Nash, Bedford; Messrs. New and Mayne, Lond.; National Society for the Employment of Epileptics, Lond., Sec. of.

P.—Dr. J. H. Phipps, Lond.; Mr. H. A. Phillips, York; Mr. C. H. Pring, Lond; Mr. A. Parkin, Hull; Mr. W. Potter, Liverpool; Mr. R. Purves, Tewkesbury; Perfection Flour Co., Birmingham.

R.—Dr. D. A. Reid, Tenby; Dr. A. Ransome, Bournemouth; Messrs. J. Richardson and Co., Leicester; Messrs. J. Raphael and Co., Lond.; Royal College of Surgeons, Dublin, Registrar of; Royal Hospitals of Bridewell and Bethlem, Clerk of.

S.—Dr. A. W. Stirling, Atlanta; Dr. J. C. Stinson, San Francisco; Dr. J. A. Shaw-Mackenzie, Lond.; Mr. F. Savery, Ealing; Mr. R. E. P. Squibbs, Nottingham; Messrs. Stubbs, Liverpool; St Mungo's Medical Society, Glasgow, Sec. of; *Science Progress*, Lond., Editor of; J. T. Segrue, Ltd., Lond.

T.—Mr. T. P. Teale, Leeds; Dr. W. N. Thursfield, Shrewsbury; Dr. J. H. Thompson, Bolton; Mr. B. Trevelyan, Bath; Mr. S. Thrower, Lond.; Mr. A. H. Tubby, Lond.; Mr. E. Thomson, Glasgow; Mr. F. S. Tidcombe, Bognor.

U.—University of London, Registrar of.

W.—Mr. A. T. Wysard, Haslar, Gosport; Messrs. West, Newman and Co., Lond.; Wolverhampton General Hosp., House Physician of.

Z.—Zygoma, Ottery St. Mary.

Letters, each with enclosure, are also acknowledged from—

A.—Ancoats Hosp., Manchester, Sec. of; Ashwood House, Kingswinford, Sec. of; Alpha, Lond; Approval, Lond.; A. E., Lond.; A. H., Dalston.

B.—Dr. L. H. Bennett, East Ilsley; Dr. G. F. Blandford, Lond.; Dr. C. Bage, S. Yarra, Australia; Mr. G. A. Bruce, Dundee; Mr. J. S. Buck, Lond.; Miss Boultbee, Lond.; Mrs. E. Behnke, Lond.; Messrs. Blondeau et Cie, Lond.; Beta, Bedford; Boscombe, Lond.

C.—Dr. R. Carter, Bath; Dr. T. F. Chavasse, Birmingham; Messrs. T. Christy and Co., Lond.; Messrs. Corkran and Co., Lond.; Messrs. Condy and Mitchell, Lond.; Cornwall County Asylum, Bodmin, Sec. of; C., Lond.; Cellula, Lond.

D.—Dr. H. L. Davies, Bolton; Mr. A. Duckworth, Bangalore; Mr. R. Davis, Lond.; Herr M. Dukes, Wien; Doctor, Lond.

E.—Dr. W. M. Elliott, Edinburgh.

F.—Dr. W. Fraser, Salford; Mr. S. Farmer, Hull; Mr. L. Felbermann, Lond.; Miss J. Foster, Irthlingboro; Mrs A. G. Fleming, Burgess Hill; Fidelis, Lond.

G.—Mr. G. Griffith, Milford Haven; G. P., Lond.

H.—Dr. J. H. Hunter, S. Shields; Dr. A. Harper Teignmouth; Dr. F. S. T. Hutchison, Bedlinog; Mr. J. Heywood, Manchester; Mr. A. G. R. Harris, Inchbrook; Mr. W. A. Hardiker, Priors Marston; Mr. J. W. C. Hawkins, Mosadabad, India; Messrs. Haasenstein and Vogler, Köln; Hanover Institute for Nurses, Lond., Sec. of; Hall, Claverley; H., Lond.

J.—Dr. C. H. L. Johnston, St. Johns, Canada.

K.—Mr. H. H. Kendrick, Hunstanton; K., Bolton.

L.—Dr. W. M. Leslie, Lond.; Mr. H. Lloyd-Davies, Bolton.

M.—Dr. J. Mullin, Cardiff; Dr. W. H. Maidlow, Taunton; Mr. H. Marmion, Lond.; Mr. D. A. Main, Banbridge; Mr. S. K. Mukerji, Chunar, India; Mr. F. Milton, Port Said, Egypt; Mr. J. T. McLoughlin, Folkestone; Mr. J. Milne, Lond.; Messrs. Macduff and Co., Lond.; Medicus, Bury; Med. Psych, Lond.

N.—Dr. J. Nevin, Leicester; Mr. H. D. Nuttall, Bury.

O.—Dr. A. B. C. Orchard, Billesdon; Mr. F. Orchard, Lond.

P.—Mr. F. E. Pirkis, Nutfield; Paisley Infirmary, Sec. of; Paris, Lond.; Partner, Lond.

R.—Dr. A. Routh, Lond.; Mr. C. Randolph, Milverton; Mr. E. Y. Rutter, Lond.; R. J. Barnsley.

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